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Our association is comprised of 16 duplexes, owned by individual members, and rented our for the most part although a few owners live in one side of their duplex. We own the 2 wells located at the complex, and we employ a SMA to take care of our system. We do have a master meter at the wells. The owners pay for the management by the SMA, and the rent the tenants pay includes the water. We respectfully request that you add an additional exception for our duplexes under, 246-290-495 (2)(d) “add” (iv) Duplex complex with a master meter.	The primary reason for the service metering requirement is to measure consumption so that distribution system leakage can be calculated. After extensive consideration of this provision of the proposed draft rule and consultation with several parties, DOH has concluded that the only way to complete a credible calculation of leakage is if service meters are installed on all direct service connections. We have further concluded that exempting certain types of water systems does not meet the intent of the law directing DOH to adopt this rule. Duplex complexes will not be exempted from the service meter requirement.
I believe the rule will be a financial burden to the smaller Group A community systems in my county. I have 16 systems with 20 or less connections, 12 systems with between 21 and 30 connections, 3 systems with 31 to 40 connections, and 3 systems with 41 to 50 connections.	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
Larger systems can divide the increase cost of following the rules among more connections keeping the cost lower. The cost would be much higher per connection for the smaller systems. Also, the smaller systems currently do not have individual meters. This would be an additional cost for them. I propose an exemption for smaller systems. At what number of connections to apply the exemption is debatable. I would like to see at least the 20 or fewer connections be exempt.	After consultation with our legal counsel and with stakeholders, DOH concluded that exemptions such as the one suggested do not meet the intent, or the specific direction of the Legislature. The legislation does allow DOH to “tailor” requirements but also states that requirements apply to “all municipal water suppliers”. We incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
We take serious exception with the 100% metering requirement. We have discussed this with DOH staff for years, and have shown repeatedly that it is not reasonable or necessary to cost-effectively accomplish the water use efficiency. DOH indicates that they believe that only through a 100% metered system can a utility accurately determine their leakage percent. Almost all of the water in our system is metered. The small amount of water that is unmetered can also be reasonably measured and factored into the leakage calculations, without a $7 million expenditure that does nothing to protect public health. Further, we believe that the provisions of HB1338 leave this decision clearly up to the water purveyor, not DOH staff. Bellingham has a solid record of water conservation, and certainly one that is better than many systems with 100% service meters. We are prepared to meet	The legal basis for requiring service meters is the requirement to set the distribution leakage standard. In order to apply the standard, water systems must determine leakage. To determine leakage, the water system must measure water systems input and consumption. DOH conducted extensive research and consultation with stakeholders and concluded that the only way to complete a credible calculation of distribution system leakage is to measure all water systems input and consumption. Cost-effectiveness is only mentioned in the Municipal Water Law under the section that addresses selection of conservation measures. Metering is being required to implement the distribution leakage standard. However, there is ample evidence to support the argument that service meters are the most cost-effective efficiency measure that can be implemented.

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the performance standards envisioned in HB1338, but should not have to bear further unfunded mandates from DOH staffers. In fact, HB1338 states that the rule shall allow the water utility to select cost-effective conservation measures, not mandate it from DOH. The cost-effectiveness of metering is very small when compared to the rest of our water conservation program in our current water system plan. Therefore, although we have systems in place for voluntary metering now, we would not likely select mandatory residential service metering as a conservation measure and DOH forcing us to do so would directly violate 2003 Water Use Efficiency Act. We agree with the City of Everett and request that you modify the proposed draft rule at WAC 246-290-495 (2)(d) by adding: "an exemption to the requirement for meters on existing connections if these connections are estimated to use less that 33% of the water sold and the leakage rate is less than 10%." We will not oppose the requirement for metering all new connections.	DOH strongly disagrees with the suggestion that efficient use of limited supplies is not a public health concern. DOH considered a number of alternative approaches, include the one suggested and concluded that a full service metering requirement was necessary to meet implement a credible distribution system leakage standard.
Also, at WAC 246-290-830(3) a phrase should be added to the end, to wit: "unless this water is entering, using and leaving the system that is being evaluated for leakage." This addition is needed for systems that have pipelines that also serve as part of the distribution system because of service connections on these pipelines. In conclusion, we believe that mandatory metering exceeds the authority of DOH, that it is in violation of HB1338, and is an unnecessary unfunded mandate.	Subtracting exported water was deemed necessary to prevent "double-counting" when determining water production. This is consistent with new guidance from the AWWA.
If DOH wants metering, then DOH should pay for it.	The Legislature did not provide funding for any water use efficiency requirements. DOH intends to seek financial assistance to help water systems meet the water use efficiency requirements.
Part 2. The Three Elements of the Regulation Section I. Conservation Planning Integration with Operations and Management Support: Recommendation 1	This comment reference the WSAC Water Use Efficiency Subcommittee Report. The proposed draft rule does incorporate the recommendation cited.
Matrix 2: Water Conservation and Water Usage Data Elements COB supports Option 2 under the WSP- Resource Stewardship and Peak Usage, off-peak and peak season totals	This comment reference the WSAC Water Use Efficiency Subcommittee Report. The proposed draft rule does incorporate the recommendation cited.
Section III. Conservation Goal Setting and Performance Reports The Role of the Governing Body	This comment reference the WSAC Water Use Efficiency Subcommittee Report. DOH will address and provide guidance during implementation.

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Support: Recommendation 2	
Regional Public Forums Support: Recommendation 1 and 2	This comment reference the WSAC Water Use Efficiency Subcommittee Report. The proposed draft rule does incorporate the recommendation cited.
Frequency of Conservation Goal Adoption Support: Option 1 or 2	This comment reference the WSAC Water Use Efficiency Subcommittee Report. The proposed draft rule does incorporate the recommendation cited.
Content Support: Option 1	This comment reference the WSAC Water Use Efficiency Subcommittee Report. The proposed draft rule does incorporate the recommendation cited.
Performance Reporting Timeline- COB supports the Performance Reporting start date on July 1, 2008 (for systems with >1,000 connections), to allow Conservation Goals to be established by July 1, 2007	This comment reference the WSAC Water Use Efficiency Subcommittee Report. The proposed draft rule does incorporate the recommendation cited.
We support the requirement for service meters. In our experience of acquiring many small water systems that were unmetered and then installing meters, we have seen dramatic reductions in water use when customers start paying for actual usage. As you know, this requirement alone is a major step, not only for several large municipal systems, but probably more importantly for many, many small systems. And, in our opinion, this requirement will result in substantial reduced water usage for those systems. For small systems, less than 500 connections, to also add a long list of additional requirements seems unnecessary (the law acknowledges lesser requirements for small systems) and impractical, both in expectation and enforcement.	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule, while ensuring it met the intent of the Legislature.
"Customers" is a more professional term for water users than "consumers". We never call our customers consumers.	WAC 246-290 currently uses the term "consumer". For consistency, the water use efficiency regulation will also use the term "consumer".
How can water purveyors comply with a rule that is vague, in that the requirements are not clearly defined? Who will actually define terms such as "evaluate". Please, let's not leave it to the courts. It appears that Health has finally been drawn into the arena of creating a rule that is wide open to interpretation by any and all parties who may be involved now and into the future. Depending upon the interpretation of terms such as "evaluate", many thousands of dollars in analysis could be required for small systems, which will probably raise the water rates significantly, and thereby violate the "affordability of rates" provision in the law.	DOH has worked rigorously to ensure that this proposed draft rule is clear. In regard to the use of the term "evaluation" we believe that we have found an appropriate balance that allows flexibility to each municipal water supplier to conduct their evaluations in a manner appropriate to their water system. The majority of input we received on this point was to avoid being overly prescriptive in this proposed draft rule, because each water system is different. DOH intends to publish guidance to help water systems comply with this proposed draft rule.

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The ultimate authority of the elected officials to make the decisions **must** be more clearly stated.	DOH believes the proposed draft rule appropriately reflects the legislative intent in regard to the authority of elected officials.
We have many recreational water systems that have a significant number of seasonal customers. Of course, we have no way of knowing how many days per year they use their property. In our area, some owners may use their cabins less than 2 weeks per year. Usage varies dramatically depending on many factors, such as weather - when the snow melts, how warm it is, how much rain, age of owners, size of family, number of friends, number of enemies (you get the idea). Also, over many years, as property values increase and if public sewer becomes available, more cabins are converted to permanent residences. Therefore, it is impossible to apply most of the proposed water conservation requirements to these particular systems.	DOH realizes that connections may not be used full-time so implementation of any water system's water use efficiency program will vary according to customer demand. This proposed draft rule gives great flexibility to each municipal water supplier to design and implement the program that is best for them. It is not clear why the provision of this proposed draft rule could not be complied with based on the information provided.
The proposed rule misses the mark regarding small water systems. The MWL states in several sections (Sec. 7.4(D), and Sec. 7.4.(d)) that smaller systems must have reduced requirements. Simply delaying implementation for several years does not follow the law. The draft rule includes only 3 system categories. We propose 3 additional categories: <100 connections 100-499 connections 500-999 connections Systems with less than 100 connections should have source and service meters. Leakage should be less than 20%. No requirements beyond leakage.	DOH reevaluated its approach to water use efficiency program development and revised these provisions to better tailor requirements to water system size.
How will Health enforce service metering of existing connections, especially for non-expanding systems? Will this become another unenforceable requirement?	DOH does not believe that this provision is un-enforceable. The primary mechanisms for enforcement of this provision will be the water systems planning process.
Annual reporting is impractical. Can Health actually manage this quantity of data? What is it's purpose? Especially smaller systems should report only every six years.	The Municipal Water Law gives water right benefits of certainty and flexibility yet carries obligations like water use accountability. Three numeric fields and one narrative field were considered minimum amount information necessary to track and monitor performance. We realize that many water systems will need education and will need to purchase, install, collect and report this data, and that incremental steps towards this end-goal is progress.
Flow meters can maintain their accuracy over many years. We have tested service meters that are at least 20 years old and have found 75% of them to be	After further consideration, the detail contained in this section is no longer seen as necessary. This section has been simplified.

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within specifications. I have heard people say meters should be replaced every ten years. This is not true (unless you're a meter salesman). To require service meters and then also establish an unreasonable (and probably almost unenforceable) testing and calibration requirement will create unnecessary havoc and anger for many, many small water system owners.	
Section 010, Definitions: The phrase ", as determined solely by the elected governing board, or governing body." should be added at the end of the definitions of affordability of rates, affordability of supplies, cost effective, forecasted demand characteristics, marginal capital costs of producing water, marginal operating costs of producing water, societal perspective, water loss control action plan, water supply characteristics, water use efficiency, and water use efficiency program.	The definitions were significantly revised. Most were simplified to avoid inadvertently adding procedural requirements. The suggested language was not incorporated. While the ultimate decision in regard to goals is in the hands of the elected governing board or governing body, DOH believes that the Legislature intended meaningful public participation through the public forum. This language could be interpreted to suggest that the public has no role in that process.
Section 010, Definitions: To the definition of capital costs, add: "and sustain" between "startup" and "a".	The term was not used in the revised proposed draft rule, so the definition was deleted.
Section 010, Definitions: The word "project" seems out of place in the definition of operating costs. Should "system" be used?	The term was not used in the revised proposed draft rule, so the definition was deleted.
Section 100, Water System Plan: Sec. 4(a)(ii)(c): Change "sold" to "leakage".	Clarified municipal water suppliers must document water sold to other public water systems.
Section 4(e)(ii)(A): Add "as determined solely by the elected governing board, or governing body" between "alternatives" and "if".	The suggested language was not incorporated. While the ultimate decision in regard to goals is in the hands of the elected governing board or governing body, DOH believes that the Legislature intended meaningful public participation through the public forum. This language could be interpreted to suggest that the public has no role in that process.
Section 4(e)(vii): Add "as determined solely by the elected governing board, or governing body" between "exist" and "shall".	The suggested language was not incorporated. While the ultimate decision in regard to goals is in the hands of the elected governing board or governing body, DOH believes that the Legislature intended meaningful public participation through the public forum. This language could be interpreted to suggest that the public has no role in that process.
Section 105, Small water systems management program: Section 4(h)(1): Add "as determined solely by the elected governing board, or governing body" after "considered".	The suggested language was not incorporated. While the ultimate decision in regard to goals is in the hands of the elected governing board or governing body, DOH believes that the Legislature intended meaningful public participation through the public forum. This language could be interpreted to suggest that the public has no role in that process.
Section 495, Meter requirements:	After further consideration the detail contained in this section is no longer seen

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Section (3)(c): Delete the entire item, because item (c) directly following says all that is needed.	as necessary. This section has been simplified.
Section 830, Distribution system leakage standard: Section (2): Delete "and purchased." Several types of water uses are not "purchased", such as flushing and fire department usage.	The term "water produced or purchased" mirrors the authorizing legislation. It pertains to water purchased by the water system as a source of supply. The uses mentioned in this comment are components of unbilled authorized use. Clarifying these terms will require guidance, but no change is necessary for the proposed draft rule.
Section 830, Distribution system leakage standard: Section (2): Increase 10% limit for the smaller systems to 20% because of the following example: 10% leakage for a 15 connection system with an annual average usage of 400 gpd per connection is 15 x 400 x 10% ÷ 1440 = 0.42 gpm. For a small water system to be required to look for a leak, or most likely multiple leaks that <u>total</u> less than ½ of one gallon per minute makes no practical or financial sense. To find a leak or leaks in the 0.1 to 1 or 2 gallon per minute range may be "technically" feasible (depending upon which salesman you are talking to), there is absolutely no reason for this rule to require it. This requirement would violate the "affordability" requirement in the law.	DOH considered a number of alternative proposals for addressing this concern. The proposed draft rule has been revised such that water systems will be considered in compliance with the leakage standard if the volume of leakage is lower than can be detected using standards methods for detecting leakage. DOH has also included provisions that give individual water systems the flexibility to address financial consideration in their Water Loss Control Action Plan. This allows the water system to schedule repairs in away to minimize the financial impact to their customers.
Section 840, Water use efficiency goal setting: Section (5)(c): Delete this entire item, because this requirement goes well beyond the law, and it is not in the spirit of the law.	The proposed draft rule was revised to require that the elected governing board or governing body must consider instead of respond to all comments.
WAC 246-290-010 Definitions Section **Problem** - "**Marginal capital costs of producing water**" and "**Marginal operating costs of producing water**" – The definitions are not practical. The comparison should be between new production capacity that is avoided or delayed because of conservation or efficiency and the cost of those conservation or efficiency measures. However, differences in quantity and timing of water availability associated with conservation and efficiency efforts compared to new production source measures must be recognized as these factors can have significant impacts on providing reliable and efficient water service. The term "reduced water production" is meaningless for many systems because of the rate at which they are growing.	The revised proposed draft rule does not use the terms addressed in this comment. Therefore, these definitions were deleted. The proposed draft rule only included a general definition for "marginal costs".

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Suggested wording: "**Marginal capital costs of producing water**" the capital cost of producing a given quantity of water which can be compared to the similar costs of conservation and efficiency measures required save or avoid using the same quantity of water. "**Marginal operating costs of producing water"** the operational cost of producing a given quantity of water for a given time period which can be compared to the similar costs of conservation and efficiency measures required save or avoid using the same quantity of water over the same period of time.	
WAC 246-290-010 Definitions Section **Problem** - "**Societal perspective**" By using 'i.e.' (that is) in the parenthesis, the term 'broad spectrum' is limited to 'environmental impact'. **Suggested wording**: use 'e.g.,' (for example).	The definition for societal perspective was revised to address this comment as well as several others.
WAC 246-290-010 Definitions Section **Problem** – "**Water use efficiency**" and "**Water use efficiency program**" – What is the meaning of the term "means minimizing …demand inefficiencies". By specifying efficiency is only related to "reducing water withdrawals and water use", the language ignores the fact that most water systems are growing and that water use efficiency and conservation measures alone will not be adequate for meeting all future new demands. The inference is that the process of meeting future water use demands must preclude the use of inchoate water rights. **Suggested wording**: "**Water use efficiency**" means minimizing water loss to non-beneficial uses and reducing the amount of water required to accomplish specific beneficial uses in certain circumstances. "**Water use efficiency program**" means policies and activities implemented to minimize water loss to non-beneficial uses and reduce the amount of water required to accomplish specific beneficial uses in certain circumstances.	DOH chose to standardize the terminology, and use "water use efficiency" rather than water conservation. This was considered less confusing and more consistent with terminology being used outside of the state.

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WAC 246-290-100 Water System Plan **Problem - (4)(c)** The water demand forecasts wording is not clear. **Suggested wording**: Water demand forecasts, developed under WAC 246-290-221, for the ensuing six-year and twenty-year planning periods, that consider both enacting and not enacting the selected water use efficiency measures, with the following factors taken into account:	This section was revised to address this comment as well as several others.
WAC 246-290-495 Metering Requirements **Problem - (3)(c)** The requirement that all meters be "installed, inspected, maintained, and calibrated, in accordance with manufacturer specifications at all times" would be very costly, impossible in some circumstances, and a terrible burden where currently installed meters are involved. The costs would far out-weigh the benefits of such a stringent approach. Just oversight by the state would be very taxing. The provision places too much control into the hands of meter manufacturers. **Suggested wording**: "Meters will be installed and maintained in accordance with industry standards."	After further consideration the detail contained in this section is no longer seen as necessary. This section has been simplified.
WAC 246-290-495 [SIC 810] Water use efficiency elements of the water system plan. **Problem** - Several entries in this section are not clear or would be difficult to carry out under the guidance as stated. **Suggested wording**: **(3) (d) (i) (B)** – "No evaluation is required for any water use efficiency measure that has been or will be implemented, nor is an evaluation required for any other measure in the associated category." **(3) (d) (iii)(c)** – "When evaluating a water efficiency measure consider the cost-effectiveness of the measure from both a monetary and societal perspective."	This section was revised to address this comment as well as several others.
WAC 246-290-495 [SIC 810] Water use efficiency elements of the water system plan. **(3) (h)** – "For systems serving one thousand or more total connections, provide an estimate of the water that would be saved by each of the evaluated measures	This section was revised to address this comment as well as several others.

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that are deemed to be cost-effective.	
WAC 246-290-820 Water use efficiency elements of small water system management programs. **Problem –** One of the entries in this section is not clear. **Suggested wording**: **(3) (c) (ii)** – "No evaluation is required for any water use efficiency measure that has been or will be implemented, nor is an evaluation required for any other measure in the associated category."	This section was revised to address this comment as well as several others.
WAC 246-290-840 Water use efficiency goal setting **Problem – (7) and (7) (b)** state that "Water use efficiency goals must include:" … "Measurable outcomes in terms of **reduced or maintained water production or usage**". This provision is essentially a ban on the use of inchoate water rights. It fails to recognize that most water systems are growing and that water use efficiency and conservation measures alone will not be adequate for meeting all future new demands. **Suggested wording**: **(7) (b) "**Measurable outcomes for chosen water efficiency measures	The goal section has been revised to clarify that goals may reflect an increase in total consumption due to growth. Establishing goals on a per capita or per connection basis will be acceptable.

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WAC 246-290-010. The most confusing element of the changes is determining what water systems are intended to be covered by the requirements. Evidently, the Legislature has provided definitions for "municipal water supplier" and "municipal water supply purposes" in RCW 90.03.015 and these definitions are, for the most part, transferred to the draft rule. Unfortunately, the Legislature did an inadequate job. The definition of "municipal water supply purposes" relies on the beneficial use of water for "residential purposes" or "governmental or governmental proprietary purposes." These latter terms are undefined; however the usual meaning of the adjectives "municipal" and "residential" leads one to believe they are referring to municipalities and residences. The confusion regarding applicability arises when there is an entity operating a NTNC system, not for municipal or residential purposes, but for industrial purposes and for its employees. (The definition of "municipal water supply purposes" is so peculiar that it incorporates the "residential use of water for a nonresidential population." Furthermore, the sentence structure itself is defective.)	DOH recognizes the confusion related to non-community water systems. DOH and Ecology have agreed that each non-community water system will need to be evaluated on a system-by-system basis to make a determination as whether or not it meets the definition of a municipal water supplier.
WAC 246-290-105. The draft revisions would require that the small water system management program include a description of rate structures. Rate structures are not applicable to some NTNC system owners that provide water only to themselves.	RCW 70.119A requires all municipal water suppliers to evaluate the feasibility of implementing a conservation-oriented rate structure. This requirement is only an evaluation and does not require implementation. For non-community water systems who are municipal water suppliers where rate structures are not applicable, an evaluation will not be required.
WAC 246-290-495. The exceptions to the service meter requirements in Sec. 495(2)(d) should include self-contained NTNC systems. Energy Northwest operates two such systems. Each has a reservoir tank and small distribution system. The service connections are the site buildings (offices and shops), none of which have a service meter. For a small system, monitoring the system use provides sufficient information. The expense of installing and maintaining service meters is not justified. (This concern would be nullified by clarity on the definitions of "municipal water supply purposes.")	The primary reason for the service metering requirement is to measure consumption so that distribution system leakage can be calculated. After extensive consideration of this provision of the proposed draft rule and consultation with several parties, DOH has concluded that the only way to complete a credible calculation of leakage is if service meters are installed on all direct service connections. We have further concluded that exempting certain types of water systems does not meet the intent of the Legislature.
WAC 246-290-830. Our comment on Sec. 495 applies to the calculation of distribution system leakage in most NTNC systems. Unless a system is fully metered, the calculation of distribution system losses will not be very meaningful. Furthermore, it should be recognized that NTNC systems,	The applicability of each provision of the law was reviewed with consideration of the different circumstances faced by non-community water systems. However, non-community water systems will be required to meter their services as well as community water systems, so there is no reason that leakage cannot be

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particularly those that do not recover costs through rates, are interested in minimizing water losses as a cost of business.	determined for non-community water systems.
General Comment on the Water Use Efficiency Requirements. The draft proposal categorizes systems by the number of service connections. A differentiation based on water production would seem more appropriate for the subject of this rulemaking.	The concept of using water production as the basis for water system size was considered during the WSAC Water Use Efficiency Subcommittee process. DOH did not choose this approach because we do not currently track water production for water systems. Also, all other DOH regulations are based on number of total connections. Using a different size basis would create challenges that would likely delay rule implementation.
WAC 246-290-010 Definitions "Authorized consumption" – We appreciate the broad terms in the definition and hope that it remains.	Supports current proposed draft rule language.
WAC 246-290-010 Definitions "System reliability"– DOH worked with the WWUC and others to develop a definition of system reliability and source reliability. This definition included broad discussion among various water utilities and DOH. We encourage DOH to use these definitions that were developed and supported by the utility community.	This definition was deleted. After further consideration, DOH concluded that the issue of reliability is already adequately addressed in WAC 246-290-420 Reliability and emergency response.
WAC 246-290-010 Definitions "societal perspective" – This is a very challenging definition that is subject to broad interpretation. We recommend deleting the use of this term and definition in the final rule.	The definition for societal perspective was revised to address this comment as well as several others.
WAC 246-290-010 Definitions "water supply characteristic" – we recommend deleting the term "any" in the definition and changing the definition to means factors that may affect…."	The definition for water supply characteristics was revised to address this comment as well as several others.
WAC 246-290-495 Metering requirements (2)(d) We agree strongly with the exemptions to the service meter requirements. We recommend exemptions be added for commercial/industrial customers and condominiums/townhomes as well. Many apartment buildings have been converted to condominiums and townhomes and it is important to recognize these homes that currently have a master meter. It is our believe that adding meters to these exempted users would result in significant private property issues in terms of how they would be installed.	The primary reason for the service metering requirement is to measure consumption so that distribution system leakage can be calculated. After extensive consideration of this provision of the proposed draft rule and consultation with several parties, DOH has concluded that the only way to complete a credible calculation of leakage is if service meters are installed on all direct service connections. We have further concluded that exempting certain types of water systems does not meet the intent of the law directing DOH to adopt this proposed draft rule.
WAC 246-290-495 Metering requirements (3) (c) and (d) The requirement that "meters be installed, inspected, maintained and calibrated in accordance with manufacturer specifications at all times" can	After further consideration the detail contained in this section is no longer seen as necessary. This section has been simplified.

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be very challenging for utilities. This requirement is relatively easy to achieve as new meters are installed. Older meter installations may not have sufficient straight pipe and have other issues that may result in inaccuracies in these meters. Programs to identify these problem meters high priorities since this is not cost effective. We are very concerned about this rigorous standard and the cost/benefit of meeting this requirement. We recommend that a "cost effective" standard be applied to this requirement.	
WAC 246-290-800 Purpose and applicability (3) This provision is too vague. It gives DOH too a broad role and discretion in program/goal development, and does not set a clear standard for basing these on system size, forecasted demand, etc. Suppliers should develop, and DOH review, rather than "suppliers shall work w/ the department to develop" the program and goals. As to "basing" it on size, demand, etc., this should be spelled out in the rule at this time.	After further review, we have concluded that this section is not necessary. A minor change will be made to our general planning requirements to address water supply characteristics and forecasted demand considerations during program plan development. The other elements of legislative intent are better addressed in guidance.
WAC 246-290-810 Water use efficiency elements of water system plans. (3)(d)(i) Overall – this section is very confusing and needs additional clarification. The section required suppliers to "Evaluate at least one water use efficiency measure from each category listed on Table 1." It is our assumption that programs that are ongoing or currently being implemented can be used to meet these requirements. If we have already implemented one water use efficiency measure from a category listed in Table 1, must we evaluate any more? Related to this, what is the standard for evaluating additional options when we update our first set of efficiency goals/programs, 6 years from now?	This section was revised to address this comment as well as several others. Ongoing programs can be included and counted toward meeting the water systems cost-effectiveness evaluation.
WAC 246-290-810 Water use efficiency elements of water system plans. (3)(d)(i)(A) The requirement that "if a water use efficiency measure is not selected for implementation from each category that applies to the system, municipal water suppliers shall evaluate at least three additional water use efficiency measure from that category" is a very significant burden with little additional benefit. We recommend that only one additional measure be considered.	This section was revised to address this comment as well as several others.
WAC 246-290-810 Water use efficiency elements of water system plans. (3)(d)(i)(B) The requirement that "No evaluation is required for any water use efficiency measure that is, or will be implemented" is not clear and causes	This section was revised to address this comment as well as several others.

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problems with meeting the requirements of this section. How can a utility address the requirements of (3)(d)(i)(A) with this requirement? Clarification of this issues is needed.	
WAC 246-290-810 Water use efficiency elements of water system plans. (3)(d)(iii)(B) What is expected to "address whether the water use efficiency measures are cost effective if the costs are shared with other entities?" Given the regional water conservation programs, how can utilities meet the requirements of this rule?	DOH feels the proposed draft rule language is sufficient and that attempting to be more prescriptive is not advisable. Each water system will need to consider the measures they have evaluated and other entities that could possibly share the cost of that measure. DOH intends to provide guidance on how water systems can address this section. Regional conservation programs clearly meet the intent of this section.
WAC 246-290-810 Water use efficiency elements of water system plans. (3)(d)(iii)(C) We strongly object to the use of the term "from a societal perspective" and recommend removal of this term. We suggest the following language: "Identify if there are other public benefits of water use efficiency measures (e.g., environmental benefits, enhanced system reliability, etc.) and evaluate these benefits qualitatively or, if practical, quantitatively."	After further consideration DOH chose to retain the term societal perspective. The definition has been revised with consideration of this comment as well as several others.
WAC 246-290-810 Water use efficiency elements of water system plans. (3)(g)(iii) It is not clear what is meant by "describe how portions of transmission lines upstream of the source meter used to calculate leakage are maintained to minimize leakage". Since this applies to all water systems, it is very unclear what is expected from suppliers and how transmission line leakage will factor into the water use efficiency requirements.	The leakage standard only applies to the distribution system. The WSAC Water Use Efficiency Subcommittee and DOH believes it is important for municipal water suppliers to identify any other leakage outside the leakage standard. This leakage will not factor in the water use efficiency requirements. The proposed draft rule has been revised to clarify this point.
WAC 246-290-810 Water use efficiency elements of water system plans. (3)(h) "Assessment of the maximum amount of water that could be saved". Given that water use efficiency programs can take some time to implement (as many of them may be voluntary), is there a timeframe for this? Or should suppliers assume 100% efficiency and no timeframe for implementation?	This section has been clarified and moved to WAC 246-290-100 Water system plan. The language written gives the water system the flexibility to identify their own timeline for implementation.
WAC 246-290-830 Distribution system leakage standard. (3) How will large systems that wholesale and retail water from the transmission system do this? This will be challenging to implement. What is "exported water"? Utilities typically wholesale or retail water.	DOH recognizes that some complexities emerge for water systems wholesaling water. The proposed draft rule allows water systems limit their determinations to their water system by subtracting exported water or determine leakage rates for all of their wholesale customers.
WAC 246-290-840 Water use efficiency goal setting (4)Suggested language:	The Municipal Water Law requires that goals be set "in an open public forum".

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"The elected governing board or governing body shall set water use efficiency goals for each system after holding an open public forum on proposed efficiency goals."	
WAC 246-290-840 Water use efficiency goal setting (5)(c) It is not possible to respond to all comments at the same meeting in which they are received. We recommend that the board "consider" rather than "respond" to all comments received.	The proposed draft rule was revised to require that the elected governing board or governing body must consider instead of respond to all comments.
WAC 246-290-840 Water use efficiency goal setting (5)(d) "Rationale for each goal" – The data required to be provided to the public may not fully explain the rationale for each goal and may limit the opportunity for broader, community based goals. We recommend that the information be provided but the rationale for the goals be set up in another section of the rule.	The language was revised in manner that DOH did not see the need to include the requirement related to the "rationale for each goal".
WAC 246-290-840 Water use efficiency goal setting (7)(b) We suggest replacing "reduced or maintained water production or usage" with "water efficiency practices".	The goal section has been revised to clarify that goals may reflect an increase in total consumption due to growth, but the concept of setting goals that reflect a reduction in water usage was retained.
WAC 246-290-840 Water use efficiency goal setting (7)(c) Some goals may be broad and cannot be achieved on a predetermined schedule. Some ability to monitor this will be identified in (7)(d). We recommend that this requirement be eliminated from the rule. If this subsection does not get eliminated, should the schedule be a 6 year, water system planning schedule?	DOH recognizes that some goals may be broad and part of a long-term change and it will be difficult to predict effect. However, it is also considered essential that water systems make an estimate and periodically review how that estimate is comparing to real changes.
WAC 246-290-840 Water use efficiency goal setting (8) It's our understanding that the water efficiency goals are part of the Water System Plan. If so, if a utility has just completed an updated Water System Plan, will this require the plan to be formally amended? If a new Board modifies the goals mid-planning process, will this require the plan to be formally amended?	No formal amendments to water system plan will be required even if initial goal setting is done outside of plan update cycle. Any goal set initially, or changed should be documented in the next plan submitted to DOH.
WAC 246-290-840 Water use efficiency goal setting (9) This section is not clear. When must the goal be met to avoid these requirements. After 1 year? We would suggest folding this into the 6 year update of goals/programs	Each municipal water supplier determines when they will meet the goals they establish for themselves. DOH has revised this section of the proposed draft rule for clarity.
WAC 246-290-850 Water use efficiency performance reports In general, the reporting requirements are the same for all sizes of utilities. This puts an unfair burden on small utilities that are not equipped to respond. We recommend that the DOH reconsider the performance reporting requirements to better address utility size.	The Municipal Water Law gives water right benefits of certainty and flexibility yet carries obligations like water use accountability. Three numeric fields and one narrative field were considered minimum information necessary to track and monitor performance. We realize that many water systems will need education and will need to purchase, install, collect and report this data, and that

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	incremental steps towards this end-goal is progress.
We are concerned about how these rules will tie into other water resource plans and the references included in the guidance documents to the rule. We recommend that these references be deleted.	The linkage to the water resource plans listed in the proposed draft rule is considered a critical factor of water supply characteristics.
The rule does not include any consequences for not meeting the requirements of these rules. To assure effective implementation, consequences must be identified.	DOH has the authority to use all available compliance tools to enforce any provision of this proposed draft rule. Early in the WSAC Water Use Efficiency Subcommittee process, DOH made it clear that compliance actions would not be specified in the regulation. This will allow DOH to use the appropriate compliance approach with consideration of the water systems specific circumstances and available DOH resources. DOH will develop a written compliance strategy as a component part of a detailed implementation plan.
A definition of a "master meter" should be provided.	The proposed draft rule was revised and this term is no longer used.
Utilities typically wholesale water rather than "export" water.	The term "wholesaling" is use differently by different water systems. The term "export" is used because new water loss work being conducted by AWWA is using the term. A definition for exported water will be added to help clarify the proposed draft rule.
We are concerned about how utilities are expected to tie their water use efficiency programs to water resource plans and any modifications that may be considered to tie water system plans to water resource plans. We recommend that utilities consider these plans (depending on utility size). However, a utilities commitment to meet the goal and objectives of other agencies and jurisdictions water resource plans should be considered during the Goal Setting process described in section 246-290-840 and should be up to the elected board or governing body of the public water system.	There are no specific provisions of this proposed draft rule that require municipal water suppliers to do anything more than what is suggested in this comment.
I attended the AWWA DSS conference in 2003. At this conference there was an excellent seminar on the proposed new AWWA standard for water audits. I believe this is AWWA RF project 2811. In any case this seminar overwhelmingly demonstrated the folly of using a flat percentage standard for water loss. I imagine many folks who helped to develop the proposed rules for the State are aware of this new AWWA standard. Wondering why it was not used. Sounds like it will be an excellent took for identifying the feasible and effective economic and physical water loss reduction goals for water systems. In a nutshell this research suggested that use of a flat rate such as 10% is plain silly. What if you have a rural water system with one customer every 500-feet of pipeline? 10% or even 20% water loss in such as system would be	After extensive review of the AWWA water audit methodology, DOH has concluded that it is not sufficiently developed to allow its use within a regulatory context. However, DOH sees great potential in this work. The proposed draft rule has been revised to allow the use of this methodology, if it is further developed and meets the intent of the Legislature.

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outstanding. On the other hand an urban water system with significant use per customer (industry for example) may consider 10% losses to be very high. This demonstrates how the use of a single flat rate for all systems is not equitable. Also the effects of conservation should be considered. As users conserve more and more water, it could actually penalize the water system by increasing its water loss percentage. Leakage stays the same, demand goes down, water loss percent goes up. I hope someone, anyone, is pushing for the proposed AWWA standard.	
In section 4 of WAC 246-290-830 there is a requirement for a water loss control plan. Is this required if the reduction of leakage is determined to not be technically feasible as described in section 8? What exactly does technically feasible mean? Shouldn't this instead read economically feasible? Let's face it civil engineers believe everything is technically feasible. Hell we can do it! Damn the cost? I work with numerous small rural water systems (less than 1,000 connections) with leakage rates above 30 to 40%. This leakage standard will require wholesale replacement of pipelines to achieve compliance. How will this work be funded?	The leakage section was revised to better address technical and economic concerns.
Does the State realize that codifying a specific water loss standard; e.g. 10% will lock us into a number which may not be practical? If we must specify a water loss standard in the WAC why not codify it in a way that allows some flexibility? It seems weird that Washington is considering codifying an absolute water loss standard when the rest of the country will probably be moving towards the new AWWA methodology; albeit slowly.	DOH found only one methodology for determining distribution system leakage that incorporated pipe size. That was the work being performed by AWWA. DOH reviewed AWWA's water audit methodology, and concluded that it is not sufficiently developed to allow its use within a regulatory context. However, DOH sees great potential in this work. The proposed draft rule has been revised to allow the use of this methodology, if it is further developed and meets the intent of the Legislature.
As long as DOH is developing rules they may as well be meaningful rules, not just more bureaucracy, more government programs and more paper work. While these may not be completely avoidable, one would hope that any necessary increases in bureaucracy, government programs and paper work would result in more water in our streams and rivers and more security for our anadromous fish populations. My main advice is to pay attention to the law of unintended consequences.	DOH appreciates the concern expressed.
Remember to keep our eye on the prize. The root purpose in all this is to address concerns of the endangered species act. Think "salmon runs." If the net result does not improve survival of endangered species then we are missing the	DOH appreciates the concern expressed.

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target.	
Paper production requires the use of vast amounts of water and harvesting of vast areas of forest, and production of problematic waste discharges. All of these actions have negative impacts on endangered species survival. Therefore, keeping paperwork to a minimum is in the interest of the addressing the primary goal of this effort: endangered species survival.	DOH appreciates the concern expressed.
There is also a considerable cost to utilities in man-hours to implement a program. Many water utilities operate with minimum of personnel and may have to hire additional staff to implement additional programs. Their goal is to provide water to their customers at the least possible cost. You will meet a lot of resistance from utilities that do not want to hire additional staff to "push paper." But maybe I'm preaching to the choir.	DOH appreciates the concern expressed.
Setting a percent unaccounted-for water goal seems, on the surface, to be laudable, and I suppose the concept has so much history that it cannot be avoided entirely. However there are several problems with this approach that should be considered, and the impacts of distribution system losses vary considerably depending on the specific circumstances of the water utility. Important considerations include whether the water has been transferred out of the basin from which it has been acquired, the specifics of local geology and the location and nature of waste discharge associated with the water use.	The point raised is well taken. DOH and the WSAC Water Use Efficiency Subcommittee have attempted to address, as best as possible, the difficulties with the percent approach. To the extent that it is reasonable and practical, the proposed draft rule does require water systems to address the water supply characteristics noted in this comment.
As you are aware, most water systems in the State of Washington are quite small and use groundwater to serve a distribution system near the groundwater source. Leakage from the distribution system mostly goes back into the ground and is not really "lost." It becomes more a matter of energy use efficiency than of water use efficiency. Granted energy production also affects water resources, but not at the water use site. If the water system pumps from a deep confined aquifer and leakage is to a shallower aquifer then the impacts of water leakage are more significant. And if the water purveyor takes water from one watershed and pipes it to another watershed then the impacts of leakage on the supplying watershed are more important, since the leakage does not go back to the supplying watershed. Also, if the point of diversion is far upstream from the place of use, even if it is in the same watershed as the place of use and the point of wastewater discharge, there will be a greater impact of leakage than if the point of withdrawal and the place of use are close together. In some cases distribution system leakage may actually bolster flows in streams. The El	While the situations noted may occur, the Legislature has directed DOH establish a distribution system leakage standard.

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Dorado Irrigation District in California was required to line all their irrigation canals and the result was to dry up many small private wells in the area. The point is that the water is not "lost," it is simply moved from one location to another and the impacts of that movement should be considered. In some cases it is more serious than in others.	
The measurement of water use efficiency by percent unaccounted-for is inherently flawed. All we need to do to decrease percent unaccounted for water is increase percent accounted-for. We could find a big water user and be sure we accurately measure and account for their use. Or we could reduce water rates and encourage watering of landscaping. Then the percent accounted-for will go up and the percent unaccounted-for will go down, but that would do nothing for water conservation. Water systems with a lot of distribution system for the amount of customers (e.g. rural water districts) and with low water use customers will tend to have a higher percent of unaccounted-for water. That doesn't necessarily mean they are using water inefficiently. Then when a utility promotes water conservation, they are also increasing their percent lost and unaccounted-for by reducing their percent accounted-for. This is not fair. I would suggest that a better measure of water loss rate would be gallons per year per inch-mile of pipe. An inch-mile would be the produce of the diameter of pipe in inches and the length of pipe in miles. Thus a system with 2 miles of 8-inch pipe and 5 miles of 6-inch pipe would have 2*8 + 5*6 = 46 inch-miles of pipe. A standard for leakage based on inch-miles of pipe would make more sense. Systems with more pipe are bound to leak more. There is no way around that. There are already AWWA standards for maximum allowable leakage for new construction of pipe based on length and diameter of the pipe, and these could be used as a basis for developing standards for allowable leakage rates. If DOH were to require utilities to comply with a reasonable leakage rate on this basis, it would require comprehensive monitoring of water use to determine these leakage rates and would be a more fair and equitable way to enforce a leakage standard.	The point raised is well taken. DOH and the WSAC Water Use Efficiency Subcommittee have attempted to address as best as possible the difficulties with the percent approach. DOH found only one methodology for determining distribution system leakage that incorporated pipe size. That was the work being performed by AWWA. DOH reviewed AWWA's water audit methodology, and concluded that it is not sufficiently developed to allow its use within a regulatory context. However, DOH sees great potential in this work. The proposed draft rule has been revised to allow the use of this methodology, if it is further developed and meets the intent of the Legislature.
One measure of water use efficiency that has not been mentioned is water use per customer. This is a bit of a difficult one because the amount of water a customer uses will depend nature of the customer. For residential customers it will depend on the size of the lot, the local climate conditions, whether the lot is forested or landscaped, and if landscaped how is it landscaped. A rural water	The issues raised in this comment were part of the discussion that led to the language found in the law. The complexity of defining water use efficiency issues and expectations for the wide variety of municipal water suppliers appears to be a reason that the law gave great flexibility. This approach will be successful only if DOH follows through with guidance and technical assistance

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district will typically supply homes on large lots that often have large vegetable gardens. I don't think we want to discourage vegetable gardens, but what about acres of lawns? And large residential lots in dryer areas will tend to use more water than similar lots in wetter areas. If the area does not have any low stream flow or endangered species issues, then perhaps they can use more water per lot than in areas where there are critical low stream flow issues.	as suggested.
How do we define water use efficiency for residential water use given the wide range of types of residences and what they use water for, and the wide range of site-specific circumstances for these residences? Nevertheless, some sort of guidelines as to what is reasonable water use per residence should be developed so that utilities can judge whether or not they have a water use efficiency issue. Then there is non-residential water use. How much water should a fish packing company use? How much water should a paper pulp mill use? How much water should a metal plating operation use? How much water should an office complex use? Have guidelines for this type of thing ever been developed? Can DOH find those guidelines if the exist, or develop guidelines if they don't exist and make them available to water purveyors? Is there someone who can do water audits on industries and assist them in reducing water use?	The issues raised in this comment were part of the discussion that lead the language found in the law. The complexity of defining water use efficiency issues and expectations of the wide variety of municipal water suppliers appears to be a reason that the law gives great flexibility to the municipal water supplier. DOH wrote the proposed draft rule to retain that flexibility. This approach will be successful only if DOH follows through with guidance and technical assistance as suggested.
DOH could help improve water use efficiency by helping to develop funding programs to assist with improvements that enhance water use efficiency. Currently, grants and low interest loans for water main replacement are virtually nonexistent. If replacing water mains to reduce leakage is being driven by protection of endangered species, then can money from environmental programs be used to replace aging and leaking water distribution systems? There is a lot of old A/C pipe out there that is notorious for springing leaks and a lot of utilities that would love to replace it if they could afford to. But replacing water distribution systems is expensive. Financial assistance for water main replacement would go a long way toward reducing water distribution system leakage. Also funds for assisting industries to improve water use efficiency would be helpful.	DOH intends to seek financial assistance to help water systems meet the water use efficiency requirements.
While the marching orders of the legislature are to develop water use efficiency, keep in mind the bigger goal of enhancing anadromous fish runs. What if a utility becomes actively involved in a project to enhance spawning grounds in local streams. That may do more to enhance survival of anadromous fish runs than all the water conservation they could do, depending, of course, on the local	The authorizing legislation does not address alternative mitigation based on actions that enhance fish populations. DOH does not feel that this approach is consistent with the direction found in the Municipal Water Law.

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circumstances. Is there some way they can get credit for that?	
While this is not directly related to water system water use efficiency, DOH should also take a close look at the wastewater reuse program. Wastewater reuse generally seems like a laudable goal, but in some circumstances development of places to put wastewater rather than return it to the streams may be counterproductive. Does it really benefit fish to develop a golf course or a wood lot to put reclaimed water on? If the utility is reducing water needs by using reclaimed water in lieu of additional water diversions, that is one thing. But if the utility is creating new water uses so that they can reclaim the water that is quite another. Sometimes it may be better to keep the water discharge to the stream rather than divert it to a reuse project.	DOH agrees that wastewater reuse can be an import new source of water. DOH works with Ecology to promote wastewater reuse and unsure public health protection.
We request the Customer demographics be revised with the deletion of reference to "Age', "average income" and if distribution is a reference to what/ (single family vs. multifamily, or ethnic representation, race,)?	The revised proposed draft rule does not contain this language.
Discussion - Non-profit purveyors do not discriminate as to age, income or other factors, strictly the cost to serve. If the regulation require a specific level of service, i.e. chemical treatment, water quality, sampling, operating permits, fees for project review, or now conservation, all customers are treated alike. Without hiring consultants (which we were assured at the beginning of this process on WUE would not be required) the development of demographics outside of water use is difficult to obtain. Since there is not a mandate at this time to consider age, income, etc, why is it placed in the definitions?	Agree with comment. Language and the affordability of rates definition deleted.
Please consider your audience when the DOH works on writing regulations for the small water systems (15-999 connections). In many cases, these water systems are managed by someone on a part time basis whose day job is not in the water regulation business. As more (likely well intentioned) regulations are created for these small systems, it becomes more and more difficult for these managers to keep up. I am aware that the new water management companies have paid lobbyists to push for more regulation in the hopes that these small water systems will be turned over to them, but this is not usually a good thing for the community as the prices for water usually jump drastically. For large systems, this is not such an issue as personnel can be assigned (even full time) to keep up with the increasing regulatory requirements. But for the small systems, it is an undue hardship. One specific suggestion I have is to have	DOH reevaluated its approach to water use efficiency program development and revised these provisions to better tailor requirements to water system size. DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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a small system water manager (like I described) on the change board to represent the interests and concerns of these small water systems.	
Most cities have got good control on hydrant flushing and construction water. They have hydrants that must be rented and calibrated annually. I'm sure the smaller cities are pushing for estimating the flushing/construction. You may want to consider making it mandatory.	The approach taken on this issue was to allow estimation of these items, if it is even necessary for the water system to meet the leakage standard.
It would be great if DOH could provide an approved list of companies that can calibrate source meters along with a definition of the word calibration. If you ask the folks that make the insertable electronic meters, they'll say that their meter is calibrated using the user interface screen and no other calibration is needed. Does calibration mean checking the flow with a lab certified meter? Who can do these tests. The list would be similar to the list some cities provide to homeowner's for backflow prevention testing.	This is a good idea that can be considered when DOH develops its detailed implementation plan.
Source meters (wells) should be calibrated more often. Maybe on a bi-annual basis.	After further consideration the detail contained in this section is no longer seen as necessary. This section has been simplified.
"Proposed Distribution Leakage Standard", "MWS may exclude from leakage standard calculation, water lost through transmission lines and raw water reservoirs." If by transmission lines you mean water mains, that seems to me to defeat the purpose of having a Leakage Standard. That doesn't leave much besides reservoirs that you are checking for leakage. In my experience most leakage is from water mains. If transmission lines does not include water mains, then I believe there needs to be further clarification.	The distribution system is defined in the current version of the WAC 246-290-010 Definitions. It does include mains. The current definitions are considered sufficient.
I am the owner of King Water Company, a SMA that manages about 150 water systems in Island county. I understand the concerns being addressed on water usage and conservation and agree with the objectives. However, many of the systems that we manage are old, may not have adequate drawings as to where the water lines are located and have many residents who are retired or on low incomes. Accordingly, the cost of locating lines and installing water meters may be high - many installations cost $500 or more, depending on terrain and size of the rural parcel.	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature. After consultation with our legal counsel and with stakeholders, DOH concluded

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In addition, many lines run along back and side property lines where mature trees and landscaping have been established and, hence, the damage to the natural environment may be significant. My suggestion is a simple one - can there be an exception to the installation of meters based on average daily usage per household? As you know the state guideline is 300 gallons per day per household, if the average usage is well below this number, say 250 gallons per day, and is regularly monitored (which we do every month) would it be acceptable to have an exemption from the requirement to install residential meters? As an additional suggestion, this could be limited to communities that are primary residential and small, may be less 1,000 connections. After all, if a household is already conserving as much as they can, and using les than 300 gallons per day, what overall benefit is to be gained by requiring the installation of meters? There could be a trigger that mandates meters for such communities if their average daily usage increases to over 300 gallons per day, this in itself would be a significant conservation incentive.	that exemptions such as the one suggested do not meet the intent, or the specific direction of the Legislature. The legislation does allow DOH to "tailor" requirements but also states that requirements apply to "all municipal water suppliers. We incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature. For clarification, there is no state guidance that establishes a benchmark for water allocation. DOH does have a *Water System Design Manual* (DOH PUB # 331-123) that can be used to determine minimum sizes for water system components. That manual does include default calculations for water consumption. It would an error to assume the *Water System Design Manual* (DOH PUB # 331-123) establishes a state water consumption standard.
Water Use Efficiency Planning Requirements These requirements appear to further increase the financial burden on water systems. A substantial amount of extra work will be required in developing, implementing, and monitoring a conservation program and plan. Is there any consideration regarding the financial burden that this rule is creating on utilities and how the extra expenses and work should be paid for?	After consultation with our legal counsel and with stakeholders, DOH concluded that exemptions such as the one suggested do not meet the intent, or the specific direction, of the Legislature. The legislation does allow DOH to "tailor" requirements but also states that requirements apply to "all municipal water suppliers. We incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
Water Use Efficiency Planning Requirements Has there been a limit set on the spending requirements that utilities should incur to plan, implement, and monitor conservation efforts? How much is too little or too much?	The water system has the flexibility to set their goals and choose the level of water use efficiency it wishes to undertake. DOH will not set standards on how much money must be spent.
Water Use Efficiency Planning Requirements If a utility is receiving water from a regional entity can the water conservation efforts be driven by the regional entity or does each utility have to have its own conservation goals and programs?	The elected governing board or governing body must set goals for each water system. The elected governing board or governing body may elect to adopt the goals set by the regional entity if they meet the requirements established in this proposed draft rule. Each water system will be expected to meet all parts of the proposed draft rule.
Distribution Leakage Standard The District reads customer water meters throughout the month. Because of this,	The regulation does not specify any particular month for data collection. The complexity of service meter data collection was the primary reason DOH only

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it would be very difficult to quantify the leakage using service meters. Meters are typically read according to routes. As a result, not all water meters are read on the same day or week for that matter and can be spread as much as 20 days apart. This makes it very difficult to get accurate reads on the consumption of water and comparisons to the production of water. We recommend that a standardized protocol for leakage determination using multiple meter read dates be developed prior to implementing this leakage requirement.	requires annual consumption data and annual calculation of leakage. The proposed language gives maximum flexibility to the individual water system to collect data when it is best for them and calculate leakage using the period that works best for them.
Distribution Leakage Standard Many uses of delivered water are estimated. For example; fire hydrant cycling, training by the fire departments, fighting fires, flushing of the distribution system to improve water quality on dead end mains, and accuracy of customer and source meters. There does not appear to be a standardized approach to identifying these uses that would make the calculation of real water losses accurate and dependable. If this is the case you must ask if this data collection is a value added effort or one that simply adds process and cost to systems that are already financially strapped. We recommend that emphasis be placed on developing a consistent approach to this data acquisition process. In addition, it has been difficult getting cooperation from other entities on the usage of water from our fire hydrants. Without additional requirements being placed on fire districts to quantify and report their usage the estimations made on this use can be grossly inaccurate. This will most assuredly skew the accuracy of any real water loss calculation.	The WSAC Water Use Efficiency Subcommittee discussed this issue on a number of occasions. DOH concluded the following: 1) While meter accuracy may be significant, it should not be included in leakage calculation. Instead the proposed draft rule should simply require that water systems maintain their meters in accordance with industry standards. 2) Developing the standardized protocol for water loss accounting is beyond the scope of legislative direction and would not allow the flexibility necessary to work for all water system. 3) If a water system is having difficulty meeting the 10 percent standard, it is in their own best interest to improve their water loss accounting system using methods that are best for them. 4) The Legislature seems to have understood the measurement accuracy issue by limiting the standard to a relatively generous 10 percent for leakage considering that the industry standard closer to 10 percent for total water loss. Finally, DOH believes that even with consideration of the inherent inaccuracy, calculating leakage using actual service meters is the only credible way to determine distribution system leakage.
Water Use Efficiency Goal Setting and Performance Reporting Chelan County PUD has been offering water efficiency measures to its customers for a number of years and already provides most of the prescribed categories in the proposed rule. Any new requirements that we do not currently offer would be relatively easy to implement. The District is concerned about being given credit for the conservation efforts already in place and not be	Existing measures can be used to meet proposed draft rule requirements; however, all new measures must be met. We encourage municipal water suppliers to take credit for past performance, and that can easily be done in the performance report narrative.

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penalized by having to use the current program offerings as a starting point and be required to develop additional measures over and above what another municipal water systems would have to do with no previous conservation involvement. The District's interpretation of the rule, WAC 246-290-810 (3)(d)(i)(B), is that it will be given credit if it continues to offer existing measures and would only be required to review additional measures if it choose not to continue existing conservation efforts.	
Water Use Efficiency Goal Setting and Performance Reporting What is the definition of "Public Process"? The specific requirements for this process in setting conservation goals are unclear. The District recommends that the specific requirements for a public process be clearly defined. How much public notice is required, who should be notified, to what extent should utilities be required to advertise, to what degree should utilities be required to receive input, what is the required forum for the public input?	The proposed draft rule was revised to clarify this section. DOH wanted to avoid being too prescriptive to allow water systems to use their existing public processes whenever possible.
Metering Requirements Regarding the meter installation and maintenance section it is stated "The proposed rule states that municipal water suppliers will be expected to test, maintain, and repair or replace meters on a regularly scheduled basis." It would be beneficial to have a definition for "regularly scheduled basis"? What frequency is being proposed? Are there other indicators that utilities should consider when considering when a meter should be tested or repaired such as; volume of flow through meters, issues with water quality, age of the meter, etc?	After consideration by DOH staff, the detail contained in this section is no longer seen as necessary. This section was simplified.
I am the senior engineer with Berryman & Henigar responsible for preparing water system plans for our clients, and I've been doing so for some thirty years. We appreciate the DOH goal of improved water use efficiency. My particular concern is with the "proposed distribution leakage standard". The water industry has recognized for years that it is desirable for water systems to get unaccounted water, or water losses, below 10 percent of the total supplied. That is not always easy to do. Your proposed rule says DOH will REQUIRE all municipal water systems to achieve a loss rate less than 10 percent. The Department knows full well that a number of smaller systems, and several large systems, do not comply now, and lack the financial resources to replace the failing pipe systems. Meaning, the DOH "requirement" will simply not be met.	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature. The specific direction in the Municipal Water Law requires DOH to establish a distribution system leakage standard. Setting a "goal" as suggested would not meet this requirement of the law.

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It is reasonable to require systems to install source meters, and reasonable to meter all customers. But to "require" that MWS maintain distribution systems to limit losses to 10 percent is not reasonable. It is a fine goal. If DOH were to offer money to achieve it, that would be one thing. But DOH will not. So a number of MWS will not meet the "requirement". So what is DOH going to do? What enforcement can realistically be employed? I know of none. Hence the State will have enacted yet another unfunded mandate that it can not enforce. Why not just state that less than 10 percent loss is the desired goal, and that each MWS needs to provide a plan for achieving the goal on some schedule, and periodically report the progress achieved, or the problems encountered?	
Two methods are cost effective for small utilities, most others are not First of all, here at Jefferson we are firm believers in two profound means in which to use water efficiently that have been the staple of our water conservation efforts for years. They are: 1) conservation rates, and; 2) source and service metering. These are also two of the most affordable and cost-effective means by which a small utility as ourselves can monitor our water usage and efficiency. Beyond these two means, we feel that most tools are far less cost effective for a small utility and can be overkill with little to no benefit to the environment or the public. Many of the proposed measures are not cost effective for the small utilities. We feel that the rule disproportionately hurts small systems with onerous and burdensome reporting and maintenance requirements to such a degree it will make us less efficient at being a water purveyor.	DOH reevaluated its approach to water use efficiency program development and revised these provisions to better tailor requirements to water system size. DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
10% not reasonable for satellite systems Jefferson staff agrees with others that the 10% unaccounted for water goal is far too lofty and impractical a requirement for our smaller systems. Jefferson operates several systems with less than 300 connections, many of which were (often grudgingly) acquired through our satellite management authority. Several of these systems were poorly designed and now we have to pay for their design and construction mistakes. This burden is not acknowledged within the rule. The rule should recognize these issues and allow utilities to set modest and gradual goals for their satellite systems, which in many cases will never approach 10%	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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unaccounted for water.	
No punitive measures for not meeting lofty 10% target Regarding the systems in which we ourselves have designed, they do come close or are under 10%. And while it is our policy to investigate and repair leaks as they arise as well as contract out system-wide leak detection on a semi-annual basis we find that 10% is simply too tight to be practical across the spectrum of system sizes and ages. The state can not legitimately require this difficult standard to be met across all systems large and small, and most importantly, there should be no punitive measures taken if a utility fails to achieve this lofty standard since enforcement of such a standard would likely overburden the state's resources as well.	DOH considered a number of alternative proposals for addressing this concern. The proposed draft rule has been revised such that water systems will be considered in compliance with the leakage standard if the volume of leakage is lower than can be detected using standards methods for detecting leakage. DOH has also included provisions that give individual water systems the flexibility to address financial consideration in their Water Loss Control Action Plan. This allows the water system to schedule repairs in away to minimize the financial impact to their customers.
Fix the ranges and their requirements to better meet economies of scale We find that the range "15-999 connections" is far too generalized and fails to recognize the operational differences between water systems within these ranges of sizes. Lumping a water system of 16 connections with another of 250 is inappropriate in simple terms of economies of scale. We like Steven's recommendations for 3 additional categories and their requirements: <100 connections, 100-499 connections, 500-999 connections; Systems with less than 100 connections should have source and service meters. Leakage (standard) should be less than 20%. No requirements beyond leakage."	DOH reevaluated its approach to water use efficiency program development and revised these provisions to better tailor requirements to water system size.
Pare down annual reporting Annual reporting, again, while a laudable idea is fraught with problems for the small and large utility. Reporting should only be required for systems over a certain number of customers (1000 plus) or otherwise, at most, be more limited in scope to source and service metering and percent unaccounted for water reporting.	The Municipal Water Law gives water right benefits of certainty and flexibility yet carries some obligations like water use accountability. Three numeric fields and one narrative field is the minimum information to be collected annually. DOH needs some process for monitoring water use efficiency progress. DOH realizes that many water systems will need education and will need to purchase, install, collect, and report this data, and that incremental steps towards this end-goal is progress.
Make some info available if it is warranted, but percentages only If DOH is going to require this information, it should be incorporated into a database that preferably is available to the purveyor as well as the agency. If information is to be made available to the public it should be expressed as a percentage only, not as a total volume. We also like the idea presented by Skagit that if a utility meets these efficiency standards, they should be "rewarded" by not being included on some publicly available list that could easily be characterized (inappropriately) as shame list of water wasters.	Address during implementation. Volume of leakage gives a more accurate picture over time than percentage because of growth or change in usages or commercial usage changing or even an aggressive water use efficiency program can skew percentage and not tell an accurate story.

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Backwash should be listed as a legitimate use If a utility can reasonably estimate its use of water for the purposes of backwash in the case of water treatment it should not count against them. Backwash, a very common usage here, was not expressly mentioned in the accounted for uses in the version of the rule that we saw.	DOH concluded that if water losses cannot be accounted for, they should be included as leakage. This was done to provide an incentive for water systems be institute better management of their operational losses. The language will be clarified to specify losses must be metered and losses can be estimated.
Performance report should be waived for small systems An annual performance report for water use efficiency measures is not realistic for smaller utilities. Water systems with less that 100 connections should be exempt, or at least not have to report until each water system plan update every 6 years.	The Municipal Water Law gives water right benefits of certainty and flexibility yet carries obligations like water use accountability. Three numeric fields and one narrative field were considered minimum amount information necessary to track and monitor performance. We realize that many water systems will need education and will need to purchase, install, collect and report this data, and that incremental steps towards this end-goal is progress.
Meter maintenance testing onerous, should be tied to service life of meter The testing of service meters is potentially onerous. Focus should be on accuracy of source meters, for smaller utilities less than 1000 connections, in particular. Requiring and scheduling service meter testing is excessive on any scale of water system and should be done when problems arise on a case by case basis or according to the projected service life of the meter.	After consideration by DOH staff, the detail contained in this section is no longer seen as necessary. This section will be simplified.
The demand forecasting proposal is not reasonable in that it assumes that as water purveyors we should somehow be able to forecast local population growth to a degree that even our local and regional governments have been unable to do. We do not have the resources to hire high-paid consultants to do studies that try to "guesstimate" population growth. Local government does not provide us with population growth information in a form that is very useful for our purposes, or broken down into areas that correspond with our service areas. We are also at the mercy of local governments' zoning whims. One election can change the policies of the City and/or County regarding zoning changes and directions of growth and they seldom, if ever, consult with local water purveyors before they change growth plans. In Whatcom County there are over 300 non-governmental water utilities.	DOH's rules have always required water system plans to consider local planning population forecasts. How consistency with local planning jurisdictions occurs is currently in review. This comment will be referred to that process.
Throughout the recent WRIA1 process we were participants, but many of our concerns were largely ignored and most of the efforts seemed to be driven by fish habitat concerns with little regard for our needs. The WRIA effort did not even integrate the Whatcom County Coordinated Water System Plan and although the CWSP is supposed to be reviewed and updated on a regular basis, the County government has not seen fit to provide any funding or support for	DOH recognizes that planning processes are complex and involve a great deal of give and take.

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such reviews.	
The leakage standards are reasonable in that a system needs to be aware of leaks for many reasons, including health safety. What is not addressed is meter error. Differences between cumulative source meter readings and service meter readings may in large part be due to meter errors. System flushing, fires and unauthorized fire hydrant use also contribute to "unaccounted for" losses. We meter our semi-annual system flushing, but the cost was over $900 for the metering device. We have requested the fire districts to inform us when they access our hydrants and give us an estimated use, but this rarely happens despite their earlier assurances. We have also had contractors working on projects for local governments take water from our fire hydrants to fill tank trucks used for dust control without even asking us for permission or giving us the quantity used or paying for the water. (Governmental bodies often seem to consider themselves immune to rules we must live by).	DOH is aware of the problems related to obtaining estimates of water use from fire districts. We do not, however, have jurisdiction over these entities. This is an issue we expect we will continue to work on through out implementation. The proposed draft rule language will be clarified to allow estimation of use of water by such entities.
Water use efficiency goals being set "through a public process". This is not a very clear rule. What exactly is meant by a "public process"? We are a member-owned water utility. The general public does not contribute to our system through taxes, rather we pay a utility tax into the general fund that benefits the general public. We also provide fire hydrants that benefit the general public even though it is solely at the expense of our Members. This also promises to be a very time-consuming and expensive exercise in futility. The "public" has not responded well to the WRIA1 "public" process that has cost millions of dollars over the past few years. Perhaps we should ask the legislature to insist on a "public process" to review the inner workings of the DOH, DOE, WSDOT, etc to determine if we can come up with ways to make those publicly funded departments more accountable and efficient, and while we're at it, the employees of those departments can attend those "public process" meetings in the evenings, on their personal time, when the public can attend. We are accountable to our Members, who own the utility. The rule doesn't mention efforts that have been under way for a long time. We implemented a conservation-oriented rate schedule years ago. We repaired or replaced service meters. We aggressively react to water leaks. New connection Members even have to sign a contract that includes a stipulated a maximum daily use among other things. If we operated our system as sloppily as many	DOH has revised the goal setting section for clarity. All of the work that DOH engages in is open to public review. This proposed draft rule will undergo a series of public hearings before finalizing.

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others, we could easily achieve greater efficiencies, but this rule could end up being punitive to those of us who have been acting responsibly. The largest purveyor in our county, the City of Bellingham, does not currently meter most of its residential users. We do and we have for a very long time.	
There are many thousands of exempt wells in our county. Although they are supposed to be limited to 5,000 gallons per day, they are not required to be source metered and there is absolutely no enforcement of the exempt well restrictions. It is patently unfair to continue to allow exempt wells to be drilled, left unmonitored and with provisions of the exempt well laws un-enforced while we are subjected to increasing levels of regulation and prevented from acquiring additional water by DOE.	The issue raised is beyond the scope of this proposed draft rule.
The draft exempts mobile home parks from placing individual meters, without specifying how big the developments may be. Our development is 16 2-bedroom duplexes, on one block not more than 1/2 mile long. Most units are occupied by singles, some by couples, fewer still are families with children. Most mobile home parks in Thurston County are far larger, whether you consider length of service lines (translate potential for undetected leaks); volume of water pumped; or number of people in the community. It's simply unfair to expect our small water service, which is operated by a Board of volunteers, to comply with individual metering requirements while these other larger organizations have been exempted. I'm sure there are other very small water systems who have the same concerns. Although, of course, our Association's main concern is trying to avoid an overwhelming (to us) expense, we are also greatly concerned about the unfair impact of the draft rules. Please revise the draft to include small duplex or multiplex developments in addition to the mobile home and apartment exemptions. If this is not possible, then please eliminate the exemptions for mega-complexes who have far greater impact on water supply and quality than a block of 16 duplexes would!	The primary reason for the service metering requirement is to measure consumption so that distribution system leakage can be calculated. After extensive consideration of this provision of the proposed draft rule and consultation with several parties, DOH has concluded that the only way to complete a credible calculation of leakage is if service meters are installed on all direct service connections. We have further concluded that exempting certain types of water systems does not meet the intent of the law directing DOH to adopt this rule. Duplex complexes will not be exempted from the service meter requirement.
DOH Publication #331-302 The first bulleted paragraph under Water Used Efficiency Elements contains this language “(including rates that encourage water use efficiency).” Using rates to	The proposed draft rule only requires an evaluation of implementing conservation-oriented rates, but does not require implementation. Municipal water suppliers are only required to implement conservation measures to meet the conservation goal set by the elected governing board or governing body.

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encourage water use efficiency is certainly an option. However, rather than requiring that municipalities use that specific option we believe they should be allowed to consider it as one option among a range of options, and to select the option that best serves its specific needs. For example, it might be just as effective for a municipality to set up a water use efficiency program that combines annual inspections with free technical assistance on how businesses can use water efficiently, perhaps even providing an incentive program to help them do so. This would be perceived as a service to the water users rather than a penalty. Sometimes lower water rates are used as an incentive to attract economic development to communities that need decent wage jobs. Lower water rates do not mean the water is being wasted. Finally, there could be an impact on public safety from raising fees to a level that will encourage water use efficiency. Higher rates could reduce voluntary hookups by people with private wells. Individuals with private wells usually want to hook up to municipal water because the quantity or quality of the water from their private well is marginal, or even poor. Economics plays a role in decisions like these and higher water rates could result in decisions to not hook up to municipal water even if the quality of the private well is poor.	
DOH Publication #331-304 The last sentence of the paragraph at the top of the second page states: “MWS may account for uses such as fire protection, flushing, construction, and other accounted for water by metering or estimating, using credible means.” Our first thought is that the terms “estimating, using credible means” is pretty vague and could lead to very lengthy debate. Secondly, ten percent is a very tight standard. Requiring municipalities to account for water used for fire protection, flushing, construction, and other non-metered uses so that they can demonstrate that only 10% of water that is not accounted for is due to actual leakage will divert the limited number of staff that we have available for fixing leaks to measuring water used for those purposes. While that will satisfy a reporting requirement it may not be effective in actually reducing the overall	DOH recognizes the concerns expressed in this comment and we will need to work with water systems to make sure those estimates are credible. The language has been revised to provide better direction on this issue, but ultimately the water system will be allowed to provide the best estimates they can through tracking and reports of events, flows, time duration. If they don’t track it through a paper tracking process, then it will be reported as distribution leakage.

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amount of water lost through leakage.	
While Cascade is generally supportive of the draft rule, there is an area of concern. Within the Water Use Efficiency Goal Setting section (5) (a), it states, "Goals must be set in a public forum that provides opportunity for consumers and the general public to participate and comment on each system's water use efficiency goals". The requirement of a public forum process raises an issue for municipal water suppliers (MWS) who are members of regional organizations, such as Cascade. MWS's who are contractually obligated to participate in a regional organization's conservation program and meet goals that have been set by the regional organization, might find it difficult to adhere to the goal-setting requirement in the public forum process described in the draft rule. This is especially true if the goals for a MWS had already been predetermined through another means based on its relationship to a regional organization. In this situation, the general public would not be able to participate in the goal setting for that MWS in a meaningful way since the goals had already been set. An alternative would be for the regional organization to fulfill the goal-setting requirement for its members (if requested by its members) through the process outlined in proposed rule. The regional organization could provide multiple opportunities for the general public to participate in the goal-setting process depending on the number of members or size of the regional organization. Overall, this would prevent redundancy and would allow for more meaningful input to MWS's conservation programs by the general public.	The elected governing board or governing body must set goals for each water system. The elected governing board or governing body may elect to adopt the goals set by the regional entity if they meet the requirements established in this proposed draft rule.
To reiterate our comment on the draft report executive summary, "WEC believes it is important that DOH convey clearly the legislature's expectations in the executive summary. Primarily, that the DOH rule 'Require public water systems to meet new, enforceable water conservation requirements' (in the words of Governor Locke's overview of the legislation)." It follows that these rules should be clear and enforceable. The expectation should be that good faith efforts to improve conservation performance are required and that failure to comply will have consequences.	DOH agrees with the concern expressed. Our detailed implementation plan will clearly outline the consequences of failure to comply and address any DOH resource issues.
We recognize that compliance efforts will need to be prioritized and would remind the department of the report recommendation regarding that issue. The	DOH intends to rely on this and other recommendations related to compliance from the WSAC Water Use Efficiency Subcommittee.

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rules should facilitate an enforcement strategy that considers the appropriate characteristics of water supply and forecasted demand as recommended in the compliance section of the report (See p. 60 of the subcommittee report).	
The definition for **"Water supply characteristic"** is inadequate as currently drafted. The definition should relate to the source used by the system AND to any surface water body in hydraulic continuity with that source. Factors to be specifically included should be the water quality assessment information for surface water bodies, relevant water management rules, conditions that have been placed on those water bodies by the state or local governments under approved watershed plans or salmon recovery plans.	The definition of water supply characteristics has been revised to include some of the items suggested. Those that were not included were considered beyond what DOH felt was necessary for this proposed draft rule.
The utility should note whether or not they are located in one of the 16 salmon critical basins (see map at http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html) Information (such as water supply bulletins available online from Ecology website) available on the groundwater source regarding factors that would compromise its availability or suitability as a continuing source should also be included.	The proposed draft rule language does not specifically address the 16 critical basins. The water supply characteristic definition was revised, and DOH feels that that definition encompasses the other suggested elements. As your comment suggests, the agencies and the public can easily determine which basin the water system in is and raise related issues with the water system.
The current definition and the use of the term in the later sections of the rule dealing with the water system plans, small water system management plans and the goal setting process are too vague and do not assure that the utility actually reviews and describes for the reviewer or the member of the public who chooses to participate conditions which might indicate the need or the desirability of special emphasis on reducing water use. They also would not provide adequate information for use by DOH in considering prioritization for compliance actions.	The definition of water supply characteristics was revised to address this as well as other comments.
WAC 246-290-495 Metering requirements. The service metering requirements are essential to the success of this program. Service meters are basic to an effective program – providing use information to the utility, enabling accurate assessment of leakage and of the effectiveness of various conservation practices as well as allowing economic incentives for more efficient consumer practices. The time line is VERY generous (we prefer an earlier date) – interim progress tracking is essential or it will simply amount to kicking this ball forward.	DOH recognizes that the timeline for meter installation on existing service connections is generous. It has been reduced to 10 years. DOH feels that this length of time is necessary to complete the decision making, planning (financial and logistical), and actual installation of meters on existing connections. It is important to keep in mind that this is essentially a retrofit of some very old equipment.
WAC 246-290-810 Water use efficiency elements of water system plans. Add the underlined. (h) For systems serving one thousand or more total connections, provide an	This section has been clarified and moved to WAC 246-290-100 Water System Plan.

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assessment of the maximum amount of water that could be saved through implementation of all water use efficiency measures deemed cost-effective by the municipal water supplier and those considered technically feasible.	
WAC 246-290-840 Water use efficiency goal setting is the heart of the process and must continue to include the key concepts included here. The public needs adequate notice and information. Their participation should be welcomed and their advice given full consideration. The goals should be stated in measurable terms. All four items under 246-290-840 (7) are important for accountability and should be retained. *[(7) Water use efficiency goals must include:* *(a) Consideration of the municipal water supplier's forecasted demand and water supply characteristics.* *(b) Measurable outcomes in terms of reduced or maintained water production or usage.* *(c) A schedule for achieving the goals.* *(d) Implementation schedules for each water use efficiency measure selected under WAC 246-290-810(3) or 246-290-820(3).]*	DOH agrees that these are critical elements of this rule. The revised proposed draft rule retains these elements.
10% or less leakage target is too lofty of a goal, considering the inherent unreliability of the measurements used to calculate unaccounted water. This should be raised to 15% to accommodate uncertainties in data-quality. As planning engineer, one of my many duties is to assemble the data used to calculate our water use efficiency. This data includes: Monthly meter readings from 81 production and master meters Billing records from 22,000 distribution meters Estimated water use reported from flushing program Water billed to contractors and municipal organizations via hydrant meters Estimated water use (if reported) by the 20 Fire Departments served by the District There are real-world challenges which make each number collected subject to inaccuracy. These inaccuracies include: Over the past three-years, there has not been a single-month when all 81 master-	The WSAC Water Use Efficiency Subcommittee discussed this issue on a number of occasions. DOH concluded the following. 1) While meter accuracy may be significant, it should not be included in leakage calculation. Instead the proposed draft rule should simply require that water systems maintain their meters in accordance with industry standards. 2) Developing the standardized protocol for water loss accounting is beyond the scope of legislative direction and would not allow the flexibility necessary to work for all water system. 3) If a water system is having difficulty meeting the 10 percent standard it is in their own best interest to improve their water loss accounting system using methods that are best for them. 4) The legislature seems to have understood the measurement accuracy issue by limiting the standard to a relatively generous 10 percent for leakage considering that the industry standard closer to 10 percent for total water loss.

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meters were all fully operational. Meters have given significant over-reads, become stuck, or been removed for up to several months for service. This means the District's production audit must be estimated based off previous monthly usage using engineering judgment. With 22,000 distribution meters, there are undoubtedly a proportion of malfunctioning meters which under-report water consumption. This directly translates to a higher-than-actual leakage volume. There is a probability of discrepancies between source, and distribution meter accuracy; again this equates to higher-than-actual leakage volume calculations. The District periodically exercises valves and maintains water quality through flushing of pipelines. The amount of water used in the program is a rough estimate, rounded to thousands-of-gallons. Of the Twenty Fire Departments being served water for training and fighting-fires, only a fraction routinely report their estimates of water consumption. This is despite written and verbal requests from the District. It is my judgment that these data-collection inaccuracies sum to over 5% of water production. Therefore, the leakage target should be raised to a more realistic 15%.	Finally, DOH believes that even with consideration of the inherent inaccuracy, calculating leakage using actual service meters is the only credible way to determine distribution system leakage.
The Distribution Leakage Standard as it is currently written is inequitable to rural suppliers. This standard should be drafted to meet EITHER a leakage percentage for the entire system, OR a leakage percentage per mile of pipe. The District has an Average Day Demand of 8 to 9 MGD. However, because of land-use within the District's service area, the District serves this water via nearly 600-miles of mainline pipe, and around 125-miles of service pipelines. This is significantly more miles of pipe per gallon of water produced than more urbanized Municipal Water Systems. It is inherently more difficult for the District (and other more rural suppliers) to meet a systemwide percentage-leakage target than it is for more urban systems of comparable demands which supply customers via a shorter length of pipe.	DOH found only one methodology for determining distribution system leakage that incorporated pipe size. That was the work being performed by AWWA. DOH reviewed AWWA's water audit methodology, and concluded that it is not sufficiently developed to allow its use within a regulatory context. However, DOH sees great potential in this work. The proposed draft rule has been revised to allow the use of this methodology, if it is further developed and meets the intent of the Legislature.
Performance reporting should be based on annual, or three-year average of the MWS's leakage percentage and volume. Whereas production is recorded on a monthly basis, billing is largely done bi-monthly. This leads to anomalies between production and consumption figures	This proposed draft rule requires for annual leakage information. It is not prescriptive in regard to how water systems address data anomalies. The issues raised about billing cycles and timing of data collection is the primary reason DOH only required annual consumption data.

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which only even out over significant lengths of time. In some cases, these anomalies may skew usage efficiency, even after 12-months. It should be up to the MWS to decide whether an anomaly has occurred (because of billing) and whether to alternatively report their 3-year average loss percentage in the annual performance report.	
MWS's in compliance with the Distribution Leakage Standard should not have to make the report available to the public. The public does not have a realistic frame of reference for what leakage is acceptable. For example, the District has around 10-percent unaccounted for water, this should be admirable within the industry. However, this equates to some 330-million gallons of water annually. The public would likely see this as shockingly wasteful, and an extraordinarily high volume of loss. (If you were Seattle, can you imagine the outrage of losing billions of gallons of water to leakage each year?) To put that 330-million gallons in proper perspective; over 11,000-times that amount flows out of the Skagit River in a given year; less than 0.009% of that resource. An equal number of gallons of water evaporates naturally from our raw water reservoir in a given year. In my estimation, releasing the annual leakage percentage and volume to the public does not serve any function other than to embarrass the MWS, and further public perception of governmental waste. System's meeting the Distribution Leakage Standard should be exempted from this requirement.	The Municipal Water Law emphasizes the role of the public in accountability for good water use efficiency performance. This is a prime educational opportunity to explain to customers about water use, water loss, costs and benefits, and the water system's priorities.
Unaccounted water augments other water resources. The District withdraws from surface water sources following a strict water resource management plan, allowing for minimum instream flows. The District then distributes this water to areas in other basins, where it recharges streams and rivers through drain fields, treatment plant effluent discharge, and leakage. Spreading water from a well-managed surface water collection has an environmental benefit to low-flow surface waters within the distribution area.	While the situations that you note may occur, the Legislature has directed DOH to establish a leakage standard.
Conservation credit for prior conservation measures. There needs to an allowable credit for conservation measures for past	The concept of credit for past performance is written into the legislation that directed DOH to adopt this rule. This was one of the reasons that municipal

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accomplishments. Where water systems have replaced failing and leaking pipes, meters and appurtenances there needs to be allowances for those efforts. We can not start water use efficiency standards at zero (0) and expect to see an attainable outcome. The District had close to 26.59% water leakage in 1990, but through an aggressive pipe replacement program, the District has brought that leakage to slightly above 10% today. To reach a leakage level which is consistently under 10% will take an even greater effort, yet there will be no recognition of the progress made thus far.	water suppliers were given full flexibility to choose their own goals and select conservation measures for implementation. This flexibility is also built into the leakage standard provisions of the law and our proposed draft rule. The situation described was considered when the DOH included language that would allow flexibility when reaching the 10 percent standard was not "technically feasible". This language was revised to better address issues of technical and economic feasibility.
Concurrence with Kitsap PUD comments. Skagit PUD has read and concurs with Kitsap PUD's comments to the draft rule verbiage.	DOH responses to those comments are included in this document. We appreciate hearing that you agree with them.
The draft rule is an important step in raising the level of water conservation by all municipal water utilities across Washington State. The Saving Water Partnership, which includes Seattle and many Seattle wholesale customers, has accomplished a lot in this regard.	Thank you for your comment.
Since the cost of evaluating conservation measures can be significant, it is important for DOH to allow groups of utilities, such as the Saving Water Partnership, to cooperatively evaluate regional conservation opportunities. This approach has produced many cost savings in past conservation efforts.	After consultation with legal counsel, DOH concluded that there is nothing in the current WAC 246-290 that prevents the partnerships described. DOH encourages this kind partnership.
The current draft rule has some inconsistencies related to due dates for conservation goal setting and conservation reporting. These should be corrected to be consistent, and allow for goal setting first and then reporting at least six months later. In general, we support the recommended rule changes. The enclosed detailed comments developed by Seattle Public Utilities staff are intended to help strengthen the language of the draft rule and to help clarify what we understand are some important features of the rule. Other utilities that are part of the Operating Board may also provide detailed comments to DOH.	The proposed draft rule was revised to better sequence reporting dates.
WAC 246-290-010 Definitions "Elected governing board" and "Governing body" –the Seattle water system supply contracts delegate conservation goal setting to a representative Operating Board, but not ultimate legal responsibility for financial or operational decisions.	This proposed draft rule reflects the direction in the Municipal Water Law that require the "elected governing board or governing body" to establish water use efficiency goals.

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Please expand or amend this definition to distinguish between decision-making authority for conservation goal setting and other utility decision-making.	
WAC 246-290-010 Definitions "Forecasted demand characteristics" – this term is confusing and does not appear to be used in the rule. We do not project our production with a demand forecast. Demand is forecasted only with regard to consumption not to supply.	This definition has been revised to address this and other comments
WAC 246-290-010 Definitions "Leakage" – definition is missing from the WAC.	The distribution system leakage provisions sufficiently define leakage. A further definition would be confusing or duplicative.
WAC 246-290-010 Definitions "Marginal capital costs of producing water" and "Marginal operating costs of producing water" – these terms apply to the cost of producing or operating the next increment of supply. Reference to avoiding, delaying, or reducing supply in this definition unnecessarily limits its application.	The proposed draft rule language was revised, and these terms are no longer used. A general definition for marginal costs is all this is included in the current revision.
WAC 246-290-010 Definitions "Societal perspective" – suggest rephrasing as the point of view of the whole community, in considering a broad spectrum of factors (e.g. environmental impacts)	The definition for societal perspective was revised to address this comment as well as several others.
WAC 246-290-010 Definitions "System reliability" – we typically distinguish between supply and system reliability and don't include water quality in this usage. Supply reliability relates to quantity of water available. System reliability relates to the ability to deliver the water to the customer's tap. Use of this term in 246-290-800(3) seems to indicate supply reliability. In addition, we recommend that you eliminate the customer confidence aspect of the definition because that is a completely different concept.	This definition was deleted. After further consideration, DOH concluded that the issue of reliability is already adequately addressed in WAC 246-290-420 Reliability and emergency response.
WAC 246-290-010 Definitions "Water use efficiency" – does not always mean reducing water withdrawals. It may mean reducing future withdrawals in the absence of conservation or slowing the rate of increasing demand. A definition that focuses on eliminating wasteful use of water would be preferable.	DOH chose to standardize the terminology, and use "water use efficiency" rather than water conservation. This was considered less confusing and more consistent with terminology being used outside of the state.
WAC 246-290-495 Metering Requirements (a) Source meters must be installed on all new and existing sources, including system interties, utilized by a public water system – Some SPU and purveyor interties are not metered, with the understanding that they are to be used only during emergencies. Please add wording to eliminate metering from emergency	The primary reason for the service metering requirement is to measure consumption so that distribution system leakage can be calculated. After extensive consideration of this provision of the proposed draft rule and consultation with several parties, DOH has concluded that the only way to complete a credible calculation of leakage is if service meters are installed on all

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interties. 2 (d) Service meters are required unless the service connections serve consumers in a: Transient non-community public water system Mobile home park with a master meter Apartment building or complex with a master meter SPU provides direct water service to condominium projects and planned residential developments where residences are served by a master meter. The three exceptions above don't appear to cover this situation. Please combine items ii and iii to include any master metered customer and/or add a service meter definition that includes metering of municipal water supply at the point of delivery to the billed customer property.	direct service connections. We have further concluded that exempting certain types of water systems does not meet the intent of the Legislature.
WAC 246-290-810 Water use efficiency elements of water system plans. (d)(i) Evaluate at least one water use efficiency measure from each category listed on Table 1 – Please include a definition for each of these categories. In particular, more information is needed about what measures are intended to be included in the Regulatory category. For example, do conservation rates count as a conservation regulatory measure? We believe regulation is a means of implementing conservation measures and not a category of conservation measures. Please consider eliminating this category altogether.	Requiring specific categories of measures to be evaluated based on a water systems size has been deleted from the proposed draft rule language. Water systems must evaluate measures from all applicable categories and evaluate a specified number of measures. The regulatory category of measures has been deleted.
WAC 246-290-810 Water use efficiency elements of water system plans. (3)(h) For systems serving one thousand or more total connections, provide an assessment of the maximum amount of water that could be saved through implementation of all water use efficiency measures deemed cost-effective by the municipal water supplier – Please include real boundaries around the analysis required of conservation potential for regulatory measures, or eliminate regulatory measure analysis altogether. Regulation is a means of implementing conservation measures, not a savings measure by itself. We use education, incentives, and regulation to produce savings by customers implementing measurable water conservation actions in different situations. Almost any conservation measure can be regulated at potentially low cost to a municipal water supplier, but may not be at all acceptable or can be achieved only at great cost to customers. In most instances, regulation is not under the control of	This section has been clarified and moved to WAC 246-290-100 Water system plan. The language written gives the water system the flexibility to identify their own timeline for implementation. The regulatory category of measures has been deleted.

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municipal water utility.	
WAC 246-290-830 Distribution system leakage standard (1) Calculate distribution system leakage annually using either of the following methods… – Please include within the WAC the qualifications and exceptions listed in the DOH flyer Fact Sheet dated June 2005 (DOH PUB #331-304): "The leakage standard will apply to the distribution grid of the water system and includes reservoirs located within the distribution system. MWS may exclude from the leakage standard calculation water lost thorough transmission lines and raw water reservoirs. All water that can not be accounted for will be considered leakage. MWS may account for uses such as flushing, etc…using credible means". The method of calculation of this requirement should be clearly defined in the WAC.	Including this language is not necessary. The distinction between transmission and distribution systems is adequately described by the existing definition. Additional language is more likely to confuse than clarify. The distribution system leakage provisions were revised, in part, for clarity.
WAC 246-290-830 Distribution system leakage standard (2) Distribution system leakage may not exceed ten percent of total water produced and purchased – Please include language in the WAC that provides for the consideration of alternatives to the percentage of total water supplied where alternatives provide a better evaluation of the water system's leakage performance. This provision is included in the final version of SB 1338 amending RCW 90.03.015, Section 7(4)(b). The DOH WUE Advisory Committee discussions on February 17 pointed to the need for DOH to allow equivalent volume-based or other methods of measuring distribution system management efficiency that do not penalize utilities who implement successful conservation programs. Otherwise, continuing declines in total consumption from conservation may result in an apparent (rather than real) increase in leakage if measured as a percent of total water use. The AWWA Water Loss Task Force has identified a number of leakage performance indicators that are preferred over measuring real losses as a percentage of system input volume (see AWWA water audit methodology, Table 2: Performance Indicators for Non-revenue Water and Water Losses: http://www.awwa.org/WaterWiser/waterloss/Docs/03IWA_AWWA_Method.cfm)	After extensive review of AWWA's water audit methodology, DOH has concluded that it is not sufficiently developed to allow its use within a regulatory context. However, DOH sees great potential in this work. The proposed draft rule has been revised to allow the use of this methodology, if it is further developed and meets the intent of the Legislature.
WAC 246-290-830 Distribution system leakage standard (8) MWS may request an exemption from the ten- percent standard for systems where it is not technically feasible to achieve compliance – An exemption	DOH considered a number of alternative proposals for addressing this concern. The proposed draft rule has been revised such that water systems will be considered in compliance with the leakage standard if the volume of leakage is

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should not be allowed to dilute the value of the standard. At the same time, it is technically feasible to replace all losses given enough funding (e.g. it is technically feasible to deliver bottled water daily to all users, but this is not economically feasible). Given the importance of meeting the leakage standard, please limit this exemption by requiring an independent third party assessment of the economic feasibility of water loss reduction as a required element of the MWS water system plan for any utility exceeding the compliance standard and who is not proposing to implement a required water loss control action program.	lower than can be detected using standards methods for detecting leakage. DOH has also included provisions that give individual water systems the flexibility to address financial consideration in their Water Loss Control Action Plan. This allows the water system to schedule repairs in away to minimize the financial impact to their customers.
WAC 246-290-840 Water use efficiency goal setting (1) All municipal water suppliers shall establish water use efficiency goals for each public water system that supplies water for municipal water supply purposes prior to July 1, 2008 – Please add language that allows utilities that are part of a regional conservation program to incorporate their regional conservation goal that will be adopted prior to July 1, 2008 into water system plans as part of each utility's regular 6-year revision cycle, rather than requiring an amendment if that plan will be updated after 2008.	The proposed draft rule language was clarified to allow goals that are adopted before a plan update is due to be included in the next plan update.
WAC 246-290-840 Water use efficiency goal setting (4) The elected governing board or governing body shall set water use efficiency goals for each system in an open public forum – The Seattle Water Supply System Operating Board is the decision-making authority for future conservation goal setting but not for all operational decisions of SPU or member wholesale utilities. Please include language in the definition of "Elected governing board" and "Governing body" that will allow for regional conservation goal setting by the entity having that decision-making authority.	This proposed draft rule reflects the direction in the Municipal Water Law that require the "elected governing board or governing body" to establish water use efficiency goals.
Environmental Perspectives While the draft rule represents an important step toward obtaining reasonably efficient water usage in Washington, we are concerned that it does not give adequate consideration to the social and environmental costs associated with development and provision of water supplies. This is a significant issue for two reasons. First, the Municipal Water Law or HB 1338 was crafted to give municipal water purveyors more "certainty" and "flexibility" in the use of their water rights. However, it was understood that increased certainty for purveyors, including access to inchoate water rights, would result in impacts to aquifer and rivers.	DOH has made every effort to understand the concerns of environmental interest groups and incorporate appropriate provisions in this proposed draft rule.

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The Legislature intended that those impacts be addressed. HB 1338 contains several provisions to address the water supply/environmental impacts equation. The centerpiece of these requirements is Chapter 7, the water use efficiency chapter which is being implemented via this rule. We expected to see significant discussion in the rule about environmental costs and how they are to be evaluated in the water use efficiency calculus. The absence of detail instructing water purveyors on how to evaluate environmental costs is a deficiency that has serious implications, both from a practical and policy standpoint. A second reason the lack of language on assessing environmental costs is surprising is that the environmental community gave significant time and effort to the rulemaking process. DOH solicited and encouraged the participation of four organizations (Center for Environmental Law & Policy, Palouse Water Conservation Network, Sierra Club, and Washington Environmental Council). We participated in good faith, assuming that environmental issues and concerns would be properly addressed in the rule. Of course, it is not too late for DOH to include language in the rule to deal with these concerns. We include comments and suggestions for rule language below.	
<u>Water Conservation Measures</u> At the heart of this rule, water purveyors must evaluate the cost-effectiveness of various water conservation measures and implement those measures if they "pencil out" and contribute to the conservation goals set by each utility. Successful water conservation programs usually employ a variety of measures tailored to address the needs of each water-conserving purveyor. Indeed, the October 27, 2004 "Conservation Measures Table," distributed at the advisory committee meeting of that date, identifies more than 40 individual measures that are routinely utilized to enhance municipal water use efficiency. According to the information provided by the representative from Seattle Public Utility, this list could be much longer. It is therefore surprising that DOH has reduced the obligations of purveyors to evaluate only 3, 4 or 5 unidentified measures, depending on total service connections. (Section 246-290-810(d)). This "Chinese menu" approach is	DOH feels that our approach to water use efficiency program development is appropriate. Part of what we learned in the WSAC Water Use Efficiency Subcommittee process was that a list of measures can be extremely long, but the effectiveness of any measure tends to diminish as you begin to implement them. The most effective measure is that first step taken to get to the next level of performance. It is misleading to suggest that a small number of measures do not constitute an effective program. The water supply characteristics definition has been revised to better address the concerns expressed in this comment as well as others.

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arbitrary, and would undermine the effectiveness of the rule by reducing the obligations of water purveyors to a bare minimum. Table 1 must be revised to specify the activities requiring evaluation within each category. Commensurately, the obligation of purveyors to evaluate conservation measures must encompass a reasonable – not minimal – effort that is tied to achieving water conservation goals. Once a purveyor quantifies the "net benefits" associated with water conservation measures or programs (i.e., avoided societal and environmental costs, along with the costs of obtaining new water supply), this figure is likely to be more or less constant for the purpose of comparing the costs of differing conservation measures and programs. It is a highly inefficient exercise for purveyors to NOT evaluate multiple measures against the calculated benefits. Section 246-290-810(d) should be revised to require purveyors to evaluate multiple measures from each category. The list of measures for evaluation should be ranked and identify rock-bottom requirements for evaluation, with an added requirement that additional measures must be considered if the water usage benefits of the initial evaluation are not adequate to meet the purveyor's conservation goals. As discussed above, the water conservation chapter of HB 1338 was not created in a vacuum. Conservation requirements should be tied to the condition of the water resource system from which water supply is being pumped. The worse the condition of the watershed, including with respect to instream flows, ESA listings and water quality impairment, factors which must be identified in the water supply characteristics description, the more water conservation measures should be evaluated.	
<u>Public Notice of Conservation Goal Setting</u> As directed by HB 1338, the rule requires water purveyors to utilize a public forum to establish their water conservation goals. The rule lacks detail, however, on how the public is to be notified of the goal-setting event. We are concerned that water purveyors will bury public notice in the legal notice section	DOH considered these suggestions, as well as several others, to enhance the public forum provisions of the proposed draft rule. We concluded that these would add significant cost and complexity to the proposed draft rule, but would not significantly enhance public participation. We did feel that participation would more likely be enhanced if information about performance was shared.

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of newspapers, in an effort to avoid public participation in and scrutiny of their decisions. The public notice section (WAC 246-290-840) should be amended to define public notice to include notice to purveyor customers (via billing insert is the logical means to accomplish this) notice to parties who request notice notice to affected Indian tribes notice to local governments within and surrounding the water supply area internet notice if the purveyor maintains a website conspicuous placement of signs and advertisements at purveyors' office and, where appropriate, city hall notice to the Department of Health, with DOH maintaining a website with times, dates and locations of upcoming goal-setting forums. This is not a trivial issue. Public participation can be rendered meaningless if the public is not informed about their opportunities to participate. Because of DOH's strong commitment to public notice and participation in its own processes, we believe you will understand the importance of this omission in the rule.	For this reason we amended the performance reporting requirements to require distribution of performance reports to customers and individuals or entities that request them.
<u>Metering</u> The rule properly requires full service metering for all purveyors. This requirement is consistent with the virtually unanimous conclusion of the advisory group that water leakage cannot be measured absent an accurate water budget accounting made possible only by service meters. Service meters also enable purveyors to provide customers with critical feedback about their usage history and conservation performance. We fully support this language in the rule. However, a compliance date of 2018 is not reasonable. We understand that DOH is attempting to tie the service meter requirement to water system planning. This makes no sense. As of the adoption of this rule, service meters obviously become an independent requirement of the law. Hence the relationship to water system planning is unnecessary. While we agree that	DOH recognizes that the timeline for meter installation on existing service connections is generous. It has been reduced to 10 years. DOH feels that this length of time is necessary to complete the decision making, planning (financial and logistical), and actual installation of meters on existing connections. It is important to keep in mind that this is essentially a retrofit of some very old equipment.

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purveyors should be given adequate time to budget and implement programs to install universal service meters, this can be accomplished in a much shorter time-frame. Five years, i.e., a deadline of December 2010, should be more than adequate.	
Performance Evaluation Performance reporting is a key component of the rule and is intended to keep the public apprised of what their water service providers are doing. If done properly, performance reporting will also provide an above-board accounting of water conservation successes and failures. Section 246-290-850 needs to amended in two ways. First, it should indicate that water purveyors not simply make this information available to the public, but affirmatively distribute it to the public. One very obvious way to do this is to require purveyors to include water conservation performance information in their annual water quality reports. Second, the rule should require that purveyors report information in a manner that allows for comparison between systems. To this end, the rule should (a) require purveyors to report per capita water consumption, and (b) provide a definition of per capita consumption that will allow consistency in interpretation of the consumption figure.	The proposed draft rule was revised to required distribution of annual performance reports. We will not be making them a mandatory component of the CCR, but will encourage municipal water suppliers to include them in their CCR. DOH feels that the required data elements are sufficient to evaluate each water systems performance. A great deal of caution should be exercised when comparing one water system against another.
WAC 246-290-010 Definitions. **"Affordability of rates"** means a charge for their non-discretionary drinking water service that the consumer is able to pay without jeopardizing their ability to pay for other necessities (food, shelter, other utility service, medical care, clothing, and transportation).	The proposed draft rule has been revised such that this term is no longer used. This definition has therefore been deleted.
WAC 246-290-010 Definitions. **"Affordability of supplies"** means the ability of a community to bear the cost, from the utility, the rate payer and the societal perspective, of providing safe and reliable drinking water to meet current and future public health and economic needs. Discretionary water use such as landscape irrigation shall not be included in analysis.	The proposed draft rule has been revised such that this term is no longer used. This definition has therefore been deleted.
WAC 246-290-010 Definitions. **"Capital costs"** means all expenditures, such as equipment and facilities, necessary to startup a program or fully develop a project. [should say that these costs are consistent with the standard acceptable method of expensing costs in	The proposed draft rule has been revised such that this term is no longer used. This definition has therefore been deleted.

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accounting.]	
WAC 246-290-010 Definitions. **"Cost-effective"** means that ~~the net benefits of a program or project exceed or equal the total costs of the program or project.~~ the present value of benefits of a program, project or measure exceed the present value of the costs of a program, project or measure as measured through analysis according to guidance provided by the department.	This definition has been revised with consideration of this comment as well as others.
WAC 246-290-010 Definitions. **"Societal perspective"** means a point of view that includes a broad spectrum of considerations (i.e. environmental impacts) of a whole community, including but not limited to: energy savings savings associated with reduced stormwater treatment due to lower contaminant loadings from fertilizers, pesticides, etc. Reduced water and wastewater conveyance, treatment water and waste water disposal Avoided cost of new water infrastructure Other environmental benefits that can be identified	This definition has been revised with consideration of this comment as well as others.
WAC 246-290-010 Definitions. **"Water supply characteristic"** means any factor that may affect the withdrawal of water from its source including any regulatory restrictions on the sources of water utilized by the system. As part of the source description, water systems should describe the environment in which it operates in order to understand potential environmental impacts of its water use. These factors include but are not limited to: Name of stream or stream in hydraulic connectivity to the aquifer source Critical water shed Instream flow rule Any ESA listings Water Quality including NPDES permits TMDL Listings Potential impact of existing or proposed water rights	This definition has been revised with consideration of this comment as well as others.
WAC 246-290-010 Definitions. **"Water use efficiency"** means minimizing supply and demand inefficiencies, and reducing water withdrawals and water use. Efficiency includes matching	This definition has been revised with consideration of this comment as well as others.

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water quality with a water use so that whenever possible water of a given quality will not be used for a purpose when a water of a lower quality would suffice.	
WAC 246-290-100 Water system plan. (4)(b). (ii) Water production and consumption data: (A) Monthly and annual production totals for each source, including any purchased water. (B) Total annual usage for customer classes. [DOH should provide a basic list of defined customer classes to allow for consistent comparison of per capita and per class usage in performance reporting. (C) Total annual water sold.	DOH does not believe that comparing water systems against each other is either required or necessarily a good way to assess performance. The Municipal Water Law required municipal water suppliers to evaluate their own water use patterns among customers. The proposed draft rule achieves this objective.
(D) Systems serving one thousand or more total connections shall provide the data that describes seasonal variations in production and consumption of each customer class defined by the system.	DOH clarified the proposed draft rule language to refer only to seasonal variations in consumption. Production variations will be apparent in monthly source meter readings. The municipal water supplier should describe sufficiently seasonal variations in customer class consumption to assist them in developing a conservation program.
(4)(e) Water resource analysis, including: (ii) Source of supply analysis, which includes: (B) A narrative description of the system's water supply characteristics; [This is too vague. What should be required, rather, is a narrative description of the source of supply and impacts related to the water supply. Specific characteristics/impacts should be indicated, such as what is the source water body, condition of instream flows, potential impacts to instream flows from increased pumping, hydraulically connected ground water, fish habitat, water quality, etc.] In Section 4(d)(ii), add a requirement that the program include information regarding “sewer plans” and water conservation, as required by Section 11 of HB 1338 and set forth in RCW 90.48.112 and 90.46.120(3).	DOH agrees that details must be provided to guide water systems to what shall be included in this narrative description. The detail of what is to be included in this section is found in the definition of water supply characteristics.
WAC 246-290-495 Metering requirements. (2)(b) Service meters must be installed on all existing service connections prior to January 1, 2010. Twelve years is much too long to accomplish what water utilities have known is required. Four years should be sufficient time to prepare a plan, develop financing and implement the plan.	DOH is considering changing the deadline for larger water systems to install service meters.
WAC 246-290-810 Water use efficiency elements of water system plans.	DOH recognizes that the timeline for meter installation on existing service

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(1) This section applies to water system plans submitted to the department for approval after January 1, 200~~7~~6, [This section should go into effect immediately since utilities have had ample information for compliance] under WAC 246-290-100. (2) Municipal water suppliers shall develop and implement a cost-effective water use efficiency program to meet the water use efficiency goals developed under WAC 246-290-840.	connections is generous. It has been reduced to 10 years. DOH feels that this length of time is necessary to complete the decision making, planning (financial and logistical), and actual installation of meters on existing connections. It is important to keep in mind that this is essentially a retrofit of some very old equipment.
WAC 246-290-810 Water use efficiency elements of water system plans. (3) Municipal water suppliers shall: (a) Describe their current water use efficiency program. (b) For systems serving one thousand or more total connections, estimate the amount of water saved through implementation of this program over the last six years. (c) Describe their water use efficiency goals and document that they are set in accordance with WAC 246-290-840 for water system plans submitted after July 1, 200~~8~~6.[again ample time has been provided] (d) Describe all water use efficiency measures to be implemented within the next six years including an implementation schedule and a budget that demonstrates how the water use efficiency measures will be funded. Water use efficiency measures must be evaluated to determine if they are cost-effective under the following: (i) Evaluate multiple water use efficiency measures from each category listed on Table 1, according to a priority ranking. Table 1 indicates which measures must be evaluated based on a system's total number of connections. The more critical the condition of the watershed as indicated by the water supply characteristics description, the more measures must be evaluated. (A) If a water use efficiency measure is not selected for implementation from each category that applies to the system, municipal water suppliers shall evaluate at least three additional water use efficiency measures from that category. (B) No evaluation is required for any water use efficiency measure that is, or will be, implemented. (ii) For systems serving less than one thousand total connections, describe the evaluation process used to select water use efficiency measures. (iii) For systems serving one thousand or more total connections:	DOH has modified the proposed draft rule to require that goals be set sooner. DOH will allow water systems the flexibility to determine how they evaluate measures from the societal perspective and will provide guidance with optional approaches.

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(A) Quantitatively evaluate water use efficiency measures to determine if they are cost-effective from the utility perspective including both marginal operating costs of producing water and marginal capital costs of producing water. (B) Address whether the water use efficiency measures are cost-effective if the costs are shared with other entities. (C) Quantitatively ~~or qualitatively~~ [there is no reason not to conduct a quantitative evaluation of environmental cost and benefits from a particular measure] evaluate water use efficiency measures to determine if they are cost-effective from the societal perspective. Qualitative measures may be employed only where it is infeasible to provide quantitative data. (e) Estimate projected water savings.	
(f) Describe how the water use efficiency program will be evaluated for effectiveness. [DOH should provide specific factors for evaluation.]	The Municipal Water Law gives a great deal of flexibility to municipal water suppliers in regard to establishing goals and selecting measures. Beyond the data required in performance reports, it is not practical to define evaluation criteria that would fit the wide variety of programs that we anticipate.
WAC 246-290-810 Water use efficiency elements of water system plans. (g) Evaluate water distribution system leakage: (i) Include annual distribution system leakage calculated under WAC 246-290-830, in percent and total volume; (ii) Include a copy of the water loss control action plan as described in WAC 246-290-830(4), if over the distribution system leakage standard per WAC 246-290-830; (iii) Estimate the amount of water leakage in the transmission lines and describe how portions of transmission lines upstream of the source meter used to calculate leakage are maintained to minimize leakage.	The suggested change has been added to the proposed draft rule.
(h) For systems serving one thousand or more total connections, provide an assessment of the maximum amount of water that could be saved through implementation of all water use efficiency measures deemed cost-effective by the municipal water supplier[as determined in sec (d) (iii) above].	DOH agrees and linked the assessment of further cost-effective conservation measures with the evaluation process outlined in WAC 246-290-810(4) Water use efficiency program. The language has been moved to WAC 246-290-100 Water system plan.
As discussed above, Table 1 should be revised to include detailed descriptions of specific water conservation measures for each category.	Requiring specific categories of measures to be evaluated based on a water systems size has been deleted from the proposed draft rule language. Water systems must evaluate measures from all applicable categories and evaluate a specified number of measures. Guidance will be developed which lists the many types of water use efficiency measures water systems can employ.
WAC 246-290-820 Small water system plans.	DOH agrees with the statement. The proposed draft rule, does tie the selection

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A single requirement for small water systems programs to evaluate only one educational conservation measure is arbitrary. The extent of a system's water conservation requirements should be tied to the condition of the watershed from which water supply is derived.	of measures to the water system's goal which must consider supply characteristics. We did establish a less complex requirement for water systems developing a Small Water System Management Program. They are not required to complete as extensive an evaluation of supply considerations. DOH felt that this was appropriate since these are small non-expanding water systems.
WAC 246-290-830 Distribution system leakage standard. [This is generally a good section, with the exception of the following exemption. There is no definition of "technically feasible" or any criteria for allowing such an exemption.] (8) Municipal water suppliers may request an exemption from the ten percent standard for systems where it is not technically feasible to achieve compliance.	The leakage section was revised to better address technical and economic concerns.
WAC 246-290-840 Water use efficiency goal setting is the heart of the process and must continue to include the key concepts included here. Goal setting should explicitly consider water supply characteristics: (5) Municipal water suppliers shall provide documentation when requested by the department and in water system plans developed under WAC 246-290-100 and small water system management programs developed under WAC 246-290-105 to demonstrate that the following goal setting requirements have been met: (a) Goals must be set in a public forum that provides opportunity for consumers and the general public to participate and comment on each system's water use efficiency goals. (b) Public notice must be made at least two weeks prior to the public forum. Public notice must include the date, time, and place of the forum. (c) The elected board or governing body of the public water system shall review and respond to all comments received. (d) The following must be made available to the public for the purpose of fully documenting the rationale for each goal. (i) All information listed under WAC 246-290-810(3) or 246-290-820(3). (ii) Annual water use efficiency performance reports prepared under WAC 246-290-850. [(iii) Water supply characteristics - recommend that each system provide the full description of the source of supply as defined in these comments]	The proposed draft rule does require that information about water supply characteristics be included as part of the goals themselves. This will be available to the public. DOH considered these suggestions, as well as several others, to enhance the public forum provisions of the proposed draft rule. We concluded that these would add significant cost and complexity to the proposed draft rule, but would not significantly enhance public participation. We did feel that participation would more likely be enhanced if information about performance was shared. For this reason we amended the performance reporting requirements to require distribution of performance reports to customers and individuals or entities that request them. DOH has retained the elements listed at the end of this comment.

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The public needs adequate notice and information. Their participation should be welcomed and their advice given full consideration. The public notice requirement (WAC 246-290-840(b)) should have more structure in this rule, including the following types of notice to be included: -notice to water supplier customers (via billing insert is the logical means to accomplish this) -notice to parties who request notice -notice to affected Indian Tribes -local governments within or surrounding the water supply area -internet notice if the purveyor maintains a website -conspicuous placement of signs and advertisements at water supplier's office and, where appropriate, city hall -notice to the Department of Health, with DOH maintaining a website with times, dates and locations of upcoming goal-setting forums. The goals should be stated in measurable terms. All four items under 246-290-840 (7) are important for accountability and should be retained: *[(7) Water use efficiency goals must include:* *(a) Consideration of the municipal water supplier's forecasted demand and water supply characteristics.* *(b) Measurable outcomes in terms of reduced or maintained water production or usage.* *(c) A schedule for achieving the goals.* *(d) Implementation schedules for each water use efficiency measure selected under WAC 246-290-810(3) or 246-290-820(3).]*	
WAC 246-290-850 Water use efficiency performance reports. (1) Municipal water suppliers shall develop annual water use efficiency performance reports for each system that supplies water for municipal water supply purposes, submit them to the department and proactively distribute them to to the public via annual water quality reports. (2) The department may specify the format and mechanism of performance report submittals.	DOH revised the proposed draft rule to require proactive distribution of performance reports. The timing of performance has been set with consideration of the ability of water systems to collect and analyze data and workload impacts to DOH. The content of performance reports was discussed at length by the WSAC Water

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(3) Systems serving one thousand connections or more must submit their first performance report by July 1, 2008~~7~~, [This should happen sooner]then by July 1 each year thereafter. (4) Systems serving nine hundred ninety-nine connections or fewer must submit their first performance report by July 1, 2009, then by July 1 each year thereafter. (5) Performance reports shall include: (a) Total annual production. Systems with multiple sources may provide aggregate data. (b) Water distribution system leakage, annual percent and total volume. If not fully metered, document progress toward becoming fully metered (source and service) including the percent of service connections metered. (c) A description of the system's water use efficiency goals including: (i) A schedule for achieving the goals. (ii) A narrative description [including appropriate water use data] of progress toward achieving the goals. (d) Per capita and/or per class usage defined in a manner that is consistent statewide and allows comparison among municipal water purveyors.	Use Efficiency Subcommittee. DOH feels that the current data elements are sufficient.
We believe that the 100% metering requirement is: (a) not reasonable, (b) not necessary and (c) not a cost-effective way to accomplish the water use efficiency. DOH indicates only through a 100% metered system can a utility accurately determine their leakage percent. This is a fallacy!! Systems can quite accurately determine their leakage rate if a majority of a system is metered. Metering does not need to be 100. This can be demonstrated with Everett's system data (see Attachment #1 for calculations): We have over 11,000 meters in our system. These meter over 94% of our water sold. We have over 13,000 unmetered connections. These single family customers use about 6% of sold water. The estimating range of unmetered usage is ± 0.4 MGD. This is less than 1% of total water sold. System leakage rate range is 4.6 – 6.2% with the most likely rate 5.4%.	The legal basis for requiring service meters is the requirement to set the distribution leakage standard. In order to apply the standard, water systems must determine leakage. To determine leakage, the water system must measure water systems input and consumption. DOH conducted extensive research and consultation with stakeholders and concluded that the only way to complete a credible calculation of distribution system leakage is to measure all system inputs and consumption. Cost-effectiveness is only mentioned in the Municipal Water Law under the section that addresses selection of conservation measures. Metering is being required to implement the distribution leakage standard. However, there is ample evidence to support the argument that service meters are the most cost-effective efficiency measure that can be implemented. DOH considered a number of alternative approaches, include the one suggested and concluded that a full service metering requirement was necessary to meet implement a credible distribution system leakage standard.

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Clearly, one can see that it is NOT necessary to meter 100% of the water in order to determine a leakage rate within a reasonable level of accuracy. In Attachment #1, the minimum probable unmetered usage (Scenario A) would result in a 6.2% leakage rate. As the estimated unmetered usage amount increases (e.g. Scenario C), our system leakage rate goes down (e.g. 4.6%). Furthermore, 2E2SHB 1338 states that the rule shall allow for the utility's selection of cost-effective conservation measures. The cost-effectiveness of metering is 1/10th that of the rest of our water conservation program in our current water system plan. Therefore, we would not select metering as a conservation measure and DOH forcing us to do so would violate the 2003 Water Use Efficiency Act. We request that you modify the proposed draft rule at WAC 246-290-495 2(d) by adding: "There would be <u>an exemption to the requirement for meters on existing connections if these connections are estimated to use less than 33% of the water sold and the system leakage rate is less than 10%</u>." We support the requirement for metering all new connections.	
Also, at WAC 246-290-830 (3) a phrase should be added to the end, to wit: "<u>unless this water is entering, using and leaving the system that is being evaluated for leakage</u>." This addition is needed for systems that have pipelines that also serve as part of the distribution system because of service connections on these pipelines.	The issue in question has been brought to the attention of the DOH by the WSAC Water Use Efficiency Subcommittee. While we acknowledge that the larger pipes and higher pressures needed to pass water through to wholesale water systems tent to increase leakage rates subtracting exported water will be retained in proposed draft rule language. It is the DOH's opinion that there is an overriding concern related to double counting of production volumes and the 10 percent standard is sufficiently generous for water systems larger enough to be in the wholesale business.
I have just come back from vacation on 12 July to find this report which is a little out of control to the people that own (Privately), holding a certificate of ownership (Dating back into the 1970's) of a water source that was established 40 years before this area became residential; As years passed, the area changed from garden farming to stick built and mobile homes. As homes were added, each home owner bought a share of the water source, to maintain the operation and maintenance of the system.	The water system described is a municipal water supplier as defined by state law. DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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This water source is only subject to 40 connections. This water source is capable of 100 connections but we, as Board of Directors, will not allow anyone else on the system. We will maintain only 40 and if you look up our records, DOH made the ruling that this system was not to allow more connections on it. This DOH ruling helped us to maintain this system as a privately owned system with certificates of ownership to 40 members only, which membership only can be transferred with a property sale. The certificates give each member the final word to their rightfully owned water source. This water system is not a MUNICIPAL, PUBLIC OR COMMUNITY SUPPLIER. This system testing rules of Class A water source regulations. is a private ownership, like a Class B water source. But we follow all	
1. Over view proposal: 15 to 999 connections, (SWSMP or SWP) 1A. This number 15 should be subject to be increased because of the same situation as we have on our system; this water system is privately owned 40 Certificates of Ownership, the ownership will never increase past 40, but is subject to decrease. As home owner population in this area increases, our water source will not allow any more connection to be installed. We (Prospect Water Assn) will maintain our water as private source and will never become a Municipal, Public or Community Water Supplier. 1B. 15 to 999 limit should be open and subject to change only because of privately owned Wells. In my area, Dallesport, Washington, there are five (5) water systems besides this system I operate that also fall under the same criteria of ownership, they are 12 to 25 private owners. 1C. There are many small system home owners throughout the United States who have pooled their money with other home owners to eliminate the high cost of drilling, pump and connections and maintaining the source. These private water systems are not a Municipal, Public or Community Suppliers, they are privately owned, maintained and operated by a private state licensed operator, funded by the association membership and should be looked on as a private home owner; most private wells don't have employees, motor vehicles, airplanes, reservoirs or boats. The funds generated by the home owners are enough to support the maintenance and operation yearly and also to support a	DOH reevaluated its approach to water use efficiency program development and revised these provisions to better tailor requirements to water system size.

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repair fund. I believe these systems are more monitored by the membership on waste, fraud and abuse issues, but understand one thing with these systems, 95% is operated with VOLUNTEER help and we still maintain all State and Federal requirements...	
2. Over view Proposal: Leakage, Wasting Water and Water usage metering system. 2A. The privately owned water system is monitored by a well-established and orientated operator who sees the water source as being a vital commodity to the home owners it supports, and again, waste and leakage is monitored very closely and maybe to an extreme. When there is a differential of water usage on the well head meter or a high electrical billing, there is a problem with the system or someone is wasting water and a good operator will implement action to find the source of leak.	The comment suggests that this water system will not encounter serious difficulty complying with this proposed draft rule.
2B. In this area, there's agriculture irrigation available; the farmers use river water, which is pumped through the community to orchards. So there is no excuse for home owners on this domestic system to use drinking water for out-door use. Rules set forth by Prospect Water Assn. states that home owners will not use household water for outside use. Every connection owner is aware of this rule. Also, each Home Owner on this connection pays county taxes to support the irrigation revenue each year to maintain and operate of the irrigation system.	DOH appreciates the concern, but the issue is beyond the scope of this proposed draft rule and the jurisdiction of DOH.
2C. You propose to monitor and meter every Well connection resource in Washington State for waste and leakage. My question to you is why do you feel WELL HEAD RESOURCES affecting the environment? The water resource from a well head is coming from an AQUIFER, ground water source; this doesn't have anything to do with fish. If there is something that needs to be monitored, it is the Agriculture "Orchards, Vineyards, etc." In the early 1990's a person from Oregon bought acres of property here in Dallesport and planted cherries. This person was unable to be granted irrigation rights from the Columbia River so he was given permits to drill deep wells in the orchard and in doing so the first year of pumping, he drained seven (7) private owned wells. They either had to drill the wells deeper or connect to another source. We, Prospect Water, chose to drill from 137 feet to 317 feet. I contacted the county commissioner, Joan Fry, and she told me right out "Don't screw with the Agriculture". I contacted DOH in Vancouver and got no place for help. This	The Legislature directed DOH to adopt rules for all municipal water suppliers. The agricultural uses you cite are beyond the scope of DOH's jurisdiction.

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orchard took 7 privately owned Wells and shut them off from household drinking water. And now we have people from California Vineyards looking to gain access to 100s of acres around the Dallesport Airport. I know for a fact they will be granted permits to sink deep wells around the Airport and this will kill or drain the aquifer our whole community of Dallesport is using. I was raised to believe that life in our communities was more important then Agriculture destroying our water resources. And now we are to look the other way… WHAT IS THE DEPARTMENT OF HEALTH GOING TO DO ABOUT THE MATTER?	
3. Proposed Water Metering Data collecting 3A. My suggestion is that any privately owned water source that can show proof of home ownership and authentic original certificate of a single Well Head operation for their household should be able to request a waiver to be exempt from the application of household metering systems. As an operator, I know what is going on with this 40-home connection and if someone abuses their water rights, they will be given a warning, and if they continue to abuse the water system and its membership, their ownership will be dissolved or revoked, plus the supply line will be removed and this house hold will not be allowed to reconnect. Prospect Water Association By-Laws clearly state this and a majority quorum membership voted its effect. Each household has a copy of the By-Laws, and if a home is sold the new household is given on ownership certificate and By-Laws. 3B. As an Operator, Owner and a 24/7 Volunteer of this water source, I have built our Water source to a reliable and efficient system, I have maintained security and protection for our resources and the connections; only authorized people can enter the service house or Well House.	After consultation with our legal counsel and with stakeholders, DOH concluded that exemptions such as the one suggested do not meet the intent or the specific direction of the Legislature. The legislation does allow DOH to "tailor" requirements but also states that requirements apply to "all municipal water suppliers. We incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
Water Use Efficiency Goal Setting and Performance Reporting This is a worthwhile element of the Draft Rule, and it is a great first step to require utilities to set measurable goals. While I do think it is important for water utilities to set goals that are based on their unique situations, I question how aggressive the goals will be among utilities that are not currently engaged in water conservation, since the Draft Rule contains no clear guidance regarding goal setting.	Thank you for your comment. DOH will address and provide guidance during implementation.

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While I recognize that all systems are unique, I believe it would be possible for DOH to provide guidance that would assist utilities in developing their water use reduction goals. DOH could develop conservation-oriented per capita water use numbers for peak and non-peak seasons. These numbers would reflect very efficient use of water, both indoors and out. It might be appropriate to have different numbers for the eastern and western parts of the state. Utilities could then use these per capita water use numbers as guideposts, and as ultimate goals – their decision would be how they will reach the efficient ERU's – how many years they will take, and which measures they will implement to achieve the reduction in water use.	
Evaluation and Selection of Water Use Efficiency Measures I am pleased that the Draft Rule requires utilities to install source and service meters. In order to use water efficiently, it's necessary to understand how much water you are using. By allowing utilities to install meters over time, the Draft Rule is sensitive to the economics involved.	The service metering requirement has been retained in the proposed draft rule.
Evaluation and Selection of Water Use Efficiency Measures It is commendable that the Draft Rule includes requirements to evaluate measures within the four prescribed categories. However, it is difficult for me to understand how the implementation of the cost-effective evaluation requirement will take place. I hope that the guidance DOH provides will be clear and specific, with equations that utilities can use (and simply plug in their numbers as appropriate). I understand that utilities are all unique, and so a "cookie-cutter" approach to cost-effectiveness would be difficult. However, I am concerned that without very clear guidance, utilities will spend resources trying to come up with a way of making the cost-effectiveness determination, and their methodologies may or may not be valid. If saving water is the ultimate goal, then it would be wiser for utilities to use their resources for implementation of measures, rather than in complex analyses.	Thank you for your suggestion. DOH will provide guidance on how to evaluate measures. Municipal water suppliers do have the option of implementing measures in lieu of completing an evaluation.
(WAC 246-290-100 → 4.a.ii.D [page 4]). *"Systems serving one thousand or more total connections shall describe seasonal variations in production and consumption of each customer class defined by the system."* This language is not clear. While we can describe consumption by customer class, production is not broken down by customer class.	This section has been clarified.
(WAC 246-290-810 → 3.d.i.A [page 13]). *"If a water use efficiency measure is not selected for implementation from each category that applies to the system,*	All additional evaluations have been deleted from the proposed draft rule. The proposed draft rule now requires municipal water suppliers to evaluate or

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municipal water suppliers shall evaluate at least three additional water use efficiency measures from that category." This is a lot of work for small water suppliers.	implement a specified number of measures based on total connections.
5.c. on page 17 should read "The elected board or governing body of the public water system shall review and ~~respond to~~ consider all comments received."	The proposed draft rule has been modified as suggested.
Can annual water use efficiency reports be part of the annual WQR or CCR?	Yes. DOH did not make this a requirement because a number of concerns were raised during the rule development process. DOH will, however, encourage this practice.
Water goal setting is set to begin 7/1/2008, as is performance reporting. The deadline for goal setting should be earlier than the deadline for performance reporting so that there is performance to report.	DOH realized the confusion created with performance reporting requirement date set prior to goal setting date and clarified proposed draft rule language.
The following is an example of a modification to the rules that would be used to provide an "off-ramp" for utilities, based on meeting certain performance measures. It is not a part of the current rules but was suggested in several forms during the rule development. We would suggest that DOH pursue such a concept further, along these lines: The water conservation rules should be written to apply to utilities in one of the 16 Critical Watersheds and with water quality limiting streams (TMDLs) and with more than 1000 connections with the exceptions below: The information and reporting rules apply to <u>all</u> utilities For utilities in one of the 16 Critical Watersheds or with TMDLs with less than 1000 connections **and** average annual residential water use per connection is greater than <u>200</u> gpd **or** <u>leakage losses</u> are greater than <u>10%</u> then full conservation rules apply. Utilities in one of the 16 Critical Watersheds or with TMDLs with more than 1000 connections and with winter (Dec Jan Feb) residential use less than <u>51</u> gpcd **and** residential Peak month use less than <u>1.6</u> times the winter average **and** <u>leakage losses</u> less than <u>5%</u> are exempt from the rules other than information and reporting.	DOH reevaluated the possibility of incorporating more prescriptive requirements linked to water supply characteristics and water use efficiency performance. In regard to water supply characteristics, we concluded that the proposed approach was the best way to ensure that the issues are sufficiently addressed and the proposed draft rule is flexible enough work with the unique circumstances of each water system. Was also concluded that, because water systems are given full flexibility by law in regard to goals and selected measures to achieve their goals being more prescriptive would not result in better water use efficiency performance. In regard to small water systems we reevaluated the approach to water use efficiency program development and revised these provisions to better tailor requirements to water system size. The "off-ramp" suggestion was considered, but we concluded that it was not possible to establish a credible threshold or design exemption that were both meaningful and met the intent of the Municipal Water Law.
WAC 246-290-010 Definitions. **"Affordability of rates"** means a charge for water service <u>for basic human</u>	Deleted definition because term was not used in the proposed draft rule.

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drinking, cooking, and sanitation needs that the consumer is able to pay without jeopardizing their ability to pay for other necessities (food, shelter, other utility service, medical care, clothing, and transportation). [This comes from statutory language in the MWL]	
WAC 246-290-010 Definitions. **"Affordability of supplies"** means the ability of a community to bear the cost, from the utility, the rate payer and the societal perspective, of providing safe and reliable drinking water for basic human drinking, cooking, and sanitation needs to meet current and future public health ~~and economic~~ needs. [This comes from statutory language. The concept of "economic needs," if left in, should be more like "to meet growth and development needs identified in relevant comprehensive plans, land use plans, etc]	Deleted definition because term was not used in the proposed draft rule.
WAC 246-290-010 Definitions. **"Capital costs"** means all expenditures, such as equipment and facilities, necessary to startup a program or fully develop a project. [Should say that these costs are consistent with the standard acceptable method of expensing costs in accounting; seems like there should be a more technical definition.]	Deleted definition because term was not used in the proposed draft rule.
WAC 246-290-010 Definitions. "Conservation program" – the definition of conservation program should be retained since the implementation period for the new rule is so long, many water system plans will still be including conservation programs as a part of the plan, as required under the MWL. This also evidently reflects to some extent the evaluation of conservation rate-setting, under RCW 43.20, which was not rescinded by the Legislature when it enacted the MWL, and should continue to be referenced by DOH.	The proposed draft rule language was revised to close the loophole identified in this comment.
WAC 246-290-010 Definitions. **"Cost-effective"** means that ~~the net benefits of a program or project exceed or equal the total costs of the program or project.~~ the present value of benefits of a program, project or measure exceed the present value of the costs of a program, project or measure as measured through analysis according to guidance provided by the department. [This is more standard language for this term.]	This definition has been revised with consideration of this comment as well as others.
WAC 246-290-010 Definitions. **"Societal perspective"** means a point of view that includes a broad spectrum of considerations (i.e. environmental impacts) of a whole community, including but not limited to:	This definition has been revised with consideration of this comment as well as others.

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energy savings savings associated with reduced stormwater treatment due to lower contaminant loadings from fertilizers, pesticides, etc. Reduced water and wastewater conveyance, treatment water and waste water disposal Avoided cost of new water infrastructure Other environmental benefits that can be identified	
WAC 246-290-010 Definitions. **"Elected governing board"** means the elected officials that have ultimate legal responsibility for technical, financial and ~~operational~~ managerial decisions for the public water system**. [Linking back to definition of "system capacity," and the general purpose of water system planning]**	The suggestion was incorporated into the definition.
WAC 246-290-010 Definitions. **"Governing body"** means the individual or group of individuals that have ultimate legal responsibility for technical, financial and ~~operational~~ managerial decisions for the public water system**. [See above]**	The suggestion was incorporated into the definition.
WAC 246-290-010 Definitions. **"Operating costs"** means ongoing expenditures, such as treatment, energy, and maintenance, necessary to implement a program or operate a ~~project~~ system over time**.**	Deleted definition because term was not used in the proposed draft rule.
WAC 246-290-010 Definitions. **"Water supply characteristic"** means any factor that may affect the withdrawal of water from its source including any regulatory restrictions on the sources of water utilized by the system. As part of the source description, water systems should describe the environment in which it operates in order to understand potential environmental impacts of its water use. These factors include but are not limited to: Name of stream or stream in hydraulic connectivity to the aquifer source Critical water shed Instream flow rule Any ESA listings Water Quality including NPDES permits TMDL Listings Potential impact of existing or proposed water rights [this reflects the Committee's discussion, and seems better to include in the rules]	This definition has been revised with consideration of this comment as well as others.

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WAC 246-290-010 Definitions. **"Water use efficiency"** means minimizing supply and demand inefficiencies, and reducing water withdrawals and water use. Efficiency includes matching water quality with a water use so that whenever possible water of a given quality will not be used for a purpose when a water of a lower quality would suffice. [This would recognize use of reclaimed water as an element of efficiency].	This definition has been revised with consideration of this comment as well as others.
WAC 246-290-100 Water system plan. (4)(b). (ii) Water production and consumption data: (A) Monthly and annual production totals for each source, including any purchased water. (B) Total annual usage for customer classes. The purveyor shall determine customer classes for their system(s). (C) Total annual water sold. (D) Systems serving one thousand or more total connections shall provide the data that describes seasonal variations in production and consumption of each customer class defined by the system. [This seems to be a better change than the one proposed, which would eliminate the current requirement to report monthly consumption totals.]	The data elements of this proposed draft rule were considered at length by the WSAC Water Use Efficiency Subcommittee. Monthly consumption data was not viewed as necessary and we learned that it would be very difficult to compile.
WAC 246-290-100 Water system plan. (4)(c) (iii) Adopted local government applicable comprehensive plan, land use plan, or development regulation and zoning ordinances.	Proposed draft rule language was clarified as suggested.
(4)(e) Water resource analysis, including: [The original language concerning conservation programs should be retained because of the delay in implementation of the full water use efficiency programs under this proposed rule.]	Language was added to the proposed draft rule to ensure current requirements planning requirements apply until the new requirements are effective.
(ii) Source of supply analysis, which includes: (B) A narrative description of the system's water supply characteristics; [This is too vague. What should be required, rather, is a narrative description of the source of supply and impacts related to the water supply. Specific characteristics/impacts should be indicated, such as what is the source water body, what are potential and likely impacts to instream flows, hydraulically connected ground water, fish habitat, water quality, etc.]	DOH agrees that details must be provided to guide water systems to what shall be included in this narrative description. The detail of what is to be included in this section is found in the definition of water supply characteristics.
WAC 246-290-100 [Again, do not delete provisions re "consservation program," since water	Language was added to the proposed draft rule to ensure current requirements planning requirements apply until the proposed requirements are effective.

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systems will continue to be required to implement until the effective date of these new rules.]	
WAC 246-290-495 Metering requirements. (1) Source meters: [It should be made clear that these requirements for source meters do not change or modify the existing DOE requirements for diversion meters, or any other existing DOH requirements for source meters.]	Agree. Language was added to the proposed draft rule as suggested.
WAC 246-290-495 Metering requirements. (2)(b) Service meters must be installed on all existing service connections prior to January 1, 2010. Twelve years is much too long to accomplish what water utilities have known is required. Four years should be sufficient time to prepare a plan, develop financing and implement the plan. DOH could be given the authority to extend this deadline upon a showing of problems re affordability, etc.	DOH recognizes that the timeline for meter installation on existing service connections is generous. It has been reduced to 10 years. DOH feels that this length of time is necessary to complete the decision making, planning (financial and logistical), and actual installation of meters on existing connections. It is important to keep in mind that this is essentially a retrofit of some very old equipment.
WAC 246-290-800 (1)(a) Define the ~~minimum~~ [eliminate the concept that the utilities only have to do the minimum] requirements for water use efficiency elements of water system plans developed under WAC 246-290-100 and small water systems management programs developed under WAC 246-290-105. The word "minimum" is not used in the MWL.	DOH agrees that the word “minimum” is not necessary and can be deleted.
WAC 246-290-810 Water use efficiency elements of water system plans. (3) Municipal water suppliers shall: (a) Describe their current water use efficiency program. (b) For systems serving one thousand or more total connections, estimate the amount of water saved through implementation of this program over the last six years. [This section should include all of the requirements under Section (5)(3) of the MWL, given the mandatory language of that section. DOH has already included these requirements in its guidance for water system plans.]	DOH has revised the planning sections of this proposed draft rule with consideration of RCW 90.03.386(3). DOH has appropriately incorporated requirements to comply with that statute.
WAC 246-290-810 Water use efficiency elements of water system plans. (1) This section applies to water system plans submitted to the department for approval after January 1, 200~~7~~6, [This section should go into effect immediately since utilities have had information for beginning to develop programs since legislation was enacted in 2003] under WAC 246-290-100.	DOH disagrees. Municipal water suppliers need sufficient time to develop their planning document after the proposed draft rule is formally adopted. Until formally adopted the specific requirements are uncertain.
WAC 246-290-810 Water use efficiency elements of water system plans. (2) Municipal water suppliers shall develop and implement a cost-effective water use efficiency program to meet the water use efficiency goals developed under WAC 246-290-840.	DOH has modified the proposed draft rule to require that goals be set sooner.

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(c) Describe their water use efficiency goals and document that they are set in accordance with WAC 246-290-840 for water system plans submitted after July 1, 2008~~6~~.[again ample time has been provided for utilities and consultants to become familiar with the provisions enacted in 2003]	
WAC 246-290-810 Water use efficiency elements of water system plans. (d) Describe all water use efficiency measures to be implemented within the next six years including an implementation schedule and a budget that demonstrates how the water use efficiency measures will be funded. Water use efficiency measures must be evaluated to determine if they are cost-effective under the following: (i) Evaluate at least one water use efficiency measure from each category listed on Table 1. Table 1 [this section is confusing and perhaps could be rewritten to better describe the intent] indicates which categories must be evaluated based on a system's total number of connections. (A) If a water use efficiency measure is not selected for implementation from each category that applies to the system, municipal water suppliers shall evaluate at least three additional water use efficiency measures from that category. (B) No evaluation is required for any water use efficiency measure that is, or will be, implemented. (ii) For systems serving less than one thousand total connections, describe the evaluation process used to select water use efficiency measures. (iii) For systems serving one thousand or more total connections: (A) Quantitatively evaluate water use efficiency measures to determine if they are cost-effective from the utility perspective including both marginal operating costs of producing water and marginal capital costs of producing water. (B) Address whether the water use efficiency measures are cost-effective if the costs are shared with other entities. (C) Quantitatively or qualitatively evaluate water use efficiency measures to determine if they are cost-effective from the societal perspective. (e) Estimate projected water savings. (f) Describe how the water use efficiency program will be evaluated for effectiveness. (g) Evaluate water distribution system leakage: (i) Include annual distribution system leakage calculated under WAC 246-290-830, in percent and total volume;	The evaluation of water use efficiency measures section was revised for clarity.

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(ii) Include a copy of the water loss control action plan as described in WAC 246-290-830(4), if over the distribution system leakage standard per WAC 246-290-830;	
(iii) Estimate the amount of water leakage in the transmission lines and describe how portions of transmission lines upstream of the source meter used to calculate leakage are maintained to minimize leakage.	The suggested change has been added to the proposed draft rule language.
(h) For systems serving one thousand or more total connections, provide an assessment of the maximum amount of water that could be saved through implementation of all water use efficiency measures deemed cost-effective by the municipal water supplier[as determined in sec (d) (iii) above].	DOH agrees with linked the assessment of further cost-effective conservation measures with the evaluation process outlined in WAC 246-290-810(4) Water use efficiency program. The language has been moved to WAC 246-290-100 Water system plan.
WAC 246-290-830 Distribution system leakage standard. [This is generally a good section, with the exception of the following exemption. There is no definition of “technically feasible” or any criteria for allowing such an exemption.] (8) Municipal water suppliers may request an exemption from the ten percent standard for systems where it is not technically feasible to achieve compliance. [Maybe DOH could define "technically feasible"]	The leakage section was revised to better address technical and economic concerns.
WAC 246-290-840 Water use efficiency goal setting. (1) All municipal water suppliers shall establish water use efficiency goals for each public water system that supplies water for municipal water supply purposes prior to submission of its next water system plan, and no later than July 1, 2008. (2) Water use efficiency goals must be designed to enhance the efficient use of water by water system customers (3) Municipal water suppliers shall evaluate and reestablish their water use efficiency goals following the process identified in WAC 246-290-840(5) at least every six years and as part of a water system plan and small water system management program approval. (4) The elected governing board or governing body shall set water use efficiency goals for each system in an open public forum. When setting water use efficiency goals, the following factors may be considered: (a) Historic water use efficiency performance. (b) Historic water use efficiency investment. (c) Customer base demographics.	Agree with comment. Provides clarity, modify proposed draft rule language. DOH agrees that details must be provided to guide water systems to what shall be included in this narrative description. The detail of what is to be included in this section is found in the definition of water supply characteristics.

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(d) Regional climate variations. (e) Forecasted demand characteristics. (f) Water supply characteristics. (g) System financial viability. (h) System reliability. (i) Affordability of water rates. (5) Municipal water suppliers shall provide documentation when requested by the department and in water system plans developed under WAC 246-290-100 and small water system management programs developed under WAC 246-290-105 to demonstrate that the following goal setting requirements have been met: (a) Goals must be set in a public forum that provides opportunity for consumers and the general public to participate and comment on each system's water use efficiency goals. (b) Public notice must be made at least two weeks prior to the public forum. Public notice must include the date, time, and place of the forum. (c) The elected board or governing body of the public water system shall review and respond to all comments received. (d) The following must be made available to the public for the purpose of fully documenting the rationale for each goal. (i) All information listed under WAC 246-290-810(3) or 246-290-820(3). (ii) Annual water use efficiency performance reports prepared under WAC 246-290-850. [(iii) Water supply characteristics - recommend that each system provide the full description of the source of supply as defined in these comments] (6) Municipal water suppliers may use existing public processes, provided that all requirements listed under WAC 246-290-840(5) are met. (7) Water use efficiency goals must include: (a) Consideration of the municipal water supplier's forecasted demand and water supply characteristics. (b) Measurable outcomes in terms of reduced or maintained water production or usage. [this is good, keep it in] (c) A schedule for achieving the goals. (d) Implementation schedules for each water use efficiency measure selected under WAC 246-290-810(3) or 246-290-820(3). (8) Municipal water suppliers may change their water use efficiency goals at any	

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time provided that the process described in WAC 246-290-840(5) is followed. (9) Municipal water suppliers shall modify the water use efficiency program for any system that does not meet any goal set through the process described in WAC 246-290-840(5). Program modifications must be designed to achieve the system's goals. Water use efficiency program modifications must be documented in the water use efficiency element of water system plans developed under WAC 246-290-810 and small water system management programs developed under WAC 246-290-820.	
WAC 246-290-850 Water use efficiency performance reports. (1) Municipal water suppliers shall develop annual water use efficiency performance reports for each system that supplies water for municipal water supply purposes, submit them to the department, notify their customers and the public that the performance reports are ~~and make them~~ available. (2) The department may specify the format and mechanism of performance report submittals. All systems required to provide consumer confidence reports under WAC 246-290- [...] shall include within those reports a notice to their customers that the water use efficiency reports required under this section are available, and may use the consumer confidence reports to provide the information required under this section. (3) Systems serving one thousand connections or more must submit their first performance report by July 1, 200~~8~~7, [This should happen sooner]then by July 1 each year thereafter. (4) Systems serving nine hundred ninety-nine connections or fewer must submit their first performance report by July 1, 2009, then by July 1 each year thereafter. (5) Performance reports shall include: (a) Total annual production. Systems with multiple sources may provide aggregate data. (b) Water distribution system leakage, annual percent and total volume. If not fully metered, document progress toward becoming fully metered (source and service) including the percent of service connections metered. (c) A description of the system's water use efficiency goals including: (i) A schedule for achieving the goals. (ii) A narrative description [including appropriate water use data] of progress toward achieving the goals.	DOH concluded that distribution of performance reports should be required and revised the proposed draft rule to that end. A number of valid concerns were raised during the WSAC Water Use Efficiency Subcommittee process about requiring performance reports to be part of consumer confidence reports. DOH will encourage municipal water suppliers to do so, but will not require it. The timing of performance repots has been established with consideration of the time needed to compile data and workload impacts on DOH.

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The 10% water leakage standard should allow for an exclusion of a water loss as a result of a "catastrophic" event. One example which comes to mind is a water main break that is difficult to repair, due to where (i.e. rural) or when (i.e. middle of the night) it takes place. Such an event may already be implied in the draft rules, but we believe it should be clearly spelled out as being excluded from the 10% standard. This would be especially helpful to small water systems.	This issue was discussed by the WSAC Water Use Efficiency Subcommittee. It is one of the reasons that compliance is based on a three year average. In further consideration of this issue, DOH concluded that there is sufficient flexibility in the requirements related to the Water Loss Control Action Plan to allow water systems to remain in compliance by submitting a plan that simply documents the event and explains how this affected their leakage determination.
Theresa, I have a question on the new rule. If we are on the Seattle supply system (a wholesale provider), and if Seattle does cost effective analysis on programs implemented in the region both prior to and after the program, will we still have to do our own cost effective analysis? Can we just state that Seattle does this for us per our contract? We do implement education programs for both youth and adults on top of promoting Seattle's regional program extensively, but we do not currently do cost effective analysis for education programs.	The water use efficiency regulations are water system specific. Therefore, it is up to each water system to comply with the regulations. Your elected officials will need to set a goal for Woodinville and will need to ensure measures are being implemented to achieve the goal. They may choose to adopt the same goal as Seattle. The cost-effective evaluation of conservation measures for the water system plan will need to be done from the water system's perspective. If Seattle completed a cost-effective evaluation from Woodinville's perspective than it would meet the draft regulation. My guess is that they do it from their perspective, not from Woodinville's perspective but you would know that better than I. The regulation does state, though, that if you are implementing a measure you will not need to evaluate it. Therefore since education is being done in Woodinville (through Seattle's program or through your own efforts), no evaluation of education would be necessary. That would be the same for any measure.
I have no idea how or when we would ask for a waiver for our water system, the draft rule being considered, but we will asking for that waiver when the time is right. The reason(s) for the waiver request are many. Some of the more important areas of concern for us are detailed below. On page 1, immediately following the cover letter, words are found which indicate that one of the key elements of the water use efficiency program is: **"Water use efficiency goals *(were)* established in a public forum".** In the definitions portion of the document, 'public forum' is described as : "A meeting open to the General Public that allows for participation of the public" Open to the public? I would doubt that that is true. We here in Haven by the Sea	DOH appreciates that this is a new challenge for some water systems; however, the Municipal Water Law requires all municipal water suppliers to have an open public forum.

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have never heard of this prior to this week. From the published schedule on the second page, DOH will review comments, finalize the proposed rule, and then begin the formal rule process, all in August and September. Where and when do we get to comment on the rule? Why didn't we hear about this a year ago. We feel that the cart is out in front of the horse. Continuing on with this thought, we also see that October and November is devoted to a "Formal comment period, and public hearings". We obviously have a **public forum** mentioned now, just a few days prior to rule adoption in December. I personally believe that the formal comment period and public hearings will result in **"No Significant Change to the rule as it stands today".** Why would that be? Too many man hours put into this document? People would be reluctant to make any changes.	
Data collection, forecasting demand, evaluating leakage, installing water use efficiency measures, and the expectation of adding the testing, maintaining and repairing or replacing meters on a regularly scheduled basis, would add so much work for us that we would have to start paying a person to accomplish these items. We would have to raise the rates so much that we would drive some of our home owners out of area. They could no longer live here in Haven by the Sea.	DOH recognizes that this rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
Installation of water meters would drive out some more of our people. We estimate that installation of water meters could cost as much as $500 to $700 per house. You have to understand that our population out here is elderly. Mostly retired, and living on a fixed income. Many are unable to absorb the kind of expense being talked about here. Your comment in the publication about "water rates that would encourage water use efficiency" really scares me. I see the specter of the State of Washington setting our water rates for us. Maybe not today, but in the near future?	After extensive consideration, DOH concluded that full metering is the only way to credibly measure distribution system leakage. DOH recognizes that this rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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Approximately one year ago, we had to raise our water rates from ten dollars per month, to fifteen dollars a month. For us, that was the first raise in water rates since 1983. This raise in rates did impose some hardship on a portion of our population. I would point out to you that Haven by the Sea has continued to do all of its water tests on schedule, our "Water Book" is complete, and is being maintained properly. We have an active leakage program, where leakage that becomes noticeable is repaired ASAP. There is another option that I see. We could operate the water system until we are broke, and then let the County take over our bankrupt system. I believe that this is a reasonable option.	
WAC 246-290-100: Water use efficiency goal setting: Section (1) states: "All municipal water suppliers shall establish water use efficiency goals for each public water system that supplies water for municipal water supply purposes prior to July 1, 2008." Our members felt the need for further clarification here, since we could not see how a utility could set a goal near the same day as the deadline date for water use efficiency reports to be distributed to the public, as outlined in WAC 246-290-850, (3): "Systems serving one thousand connections or more must submit their first performance report by July 1, 2008, then by July 1 each year thereafter." DOH is apparently willing to consider past conservation successes, but for small utilities that have not previously practiced water efficiency measures, setting a goal near the date of data reporting does not allow the utility enough time to implement water efficiency measures to help them attain that goal. If DOH is looking for a year's worth of data to evaluate in the performance reporting, DOH should state that goals should be set that will incorporate a year's worth of data and factor in time for the cost of producing and distributing the reports. One example could be as follows: "All municipal water suppliers shall establish water use efficiency goals for each public water system that supplies water for municipal water supply purposes no later than December 31, 2007. Data collection shall occur between the dates of January 1, 2008 and	DOH realizes the confusion created with performance reporting requirement and clarified proposed draft rule language.

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December 31, 2008. All performance reports shall be distributed to customers of each water supplier no later than July 1, 2009." (This aligns with the CCR report distribution, since CCRs cover the period between January 1 – December 31 of each year. This will make it easier for those members who wish to include their performance reports in their CCRs.) If DOH is concerned with getting the rule implemented sooner, as an alternative, the language could read, "All municipal water suppliers shall establish water use efficiency goals for each public water system that supplies water for municipal water supply purposes no later than December 31, 2006. Data collection shall occur between the dates of January 1, 2007 and December 31, 2007. All performance reports shall be distributed to customers of each water supplier no later than July 1, 2008." This puts pressure on DOH to develop rule implementation guidance and training workshops early in 2006, so that utilities can understand the goal setting process in order to have their goals designated by December 2006. This time frame will provide DOH with ample time to set up and conduct workshops for utilities on rule implementation in 2006 and 2007. Training workshops will be integral to helping utilities succeed with attaining water efficiency goals, acquire and analyze data, and develop reports. Developing and implementing water efficiency programs is not always intuitive to many smaller utilities, and they will need assistance throughout the process. This time frame will also allow utilities to work within their individual budget cycle processes, some annual and some bi-annual, to set aside funding for water use efficiency programs. DOH needs to determine and clarify whether or not it would be best to set some structure to the goal setting and performance reporting process, or if it feels that a more informal goal setting and performance reporting process will satisfy their needs during the drafting and eventual implementation of the rule.	
WAC 246-290-100: Water use efficiency goal setting: We suggest a revision of section (5)(c) as follows: "The elected board or governing body of the public water system shall review <u>and consider</u> all	This suggestion was incorporated in the proposed draft rule.

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comments received."	
WAC 246-290-100: Water use efficiency goal setting: Members were concerned about how each individual utility's goal setting could be incorporated with their water system plans to prevent an additional step and increased workload. Members wondered whether or not the rule could be revised to reflect that as a part of water system plans, water efficiency goals are set at that time, rather than as a separate item. Members also wondered how individual utility goal setting would be affected by regional entities (such as the Saving Water Partnership, which requires its members to achieve a 1% per year reduction.) Seattle purveyors in this group would not be able to set a goal of less than 1%, but the assumption is that the utility could set a higher goal if desired. Clarification is needed in the rule as to how conservation programs developed by regional water associations will be applied toward the programs of each individual utility participating in said organization, as some WCCPS members would like assurance that regional programs will be "counted" in the utility's overall evaluation of its measures, even though each individual utility is responsible for its own goal setting and performance reporting.	The WSAC Water Use Efficiency Subcommittee gave considerable attention to the linkage between planning and goal setting. It was concluded that the goal setting could be synchronized with planning cycles, but that this should not be required. Some water system representatives expressed a desire to revisit their goals on a more frequent basis. The current language does not require a more frequent goal setting process. Furthermore, setting goal at the time of plan development is acceptable under the current language. In regard to regional programs DOH considered including specific language but determined it was not necessary. Regional programs can be used to meet the requirements of this proposed draft rule. However, each water system will need to demonstrate how participation in regional programs will advance them toward their goals.
WAC 246-290-810: Water use efficiency elements of water system plans: (3)(d), end of paragraph**:** "Water use efficiency measures must be evaluated to determine if they are cost effective under the following: Evaluate at least one water use efficiency measure from each category listed on Table 1. Table 1 indicates which categories must be evaluated based on a system's total number of connections." This whole section needs greater clarification and Table 1 definitely needs enhancement. Evaluation is not the same as implementation, and we found this to be unclear throughout this section.	DOH clarified the section on evaluating water use efficiency measures. Municipal water suppliers have the option to evaluate or implement measures.
WAC 246-290-810: Water use efficiency elements of water system plans: It might be helpful to suggest some components (not necessarily an all-inclusive	Thank you for your suggestion. DOH will provide guidance on what types of measures can be found in each category.

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list) for each category, especially for smaller utilities that may not currently have programs in place and may not even be certain what to evaluate. (This may be able to be done in the rule implementation phase.)	
WAC 246-290-810: Water use efficiency elements of water system plans: In addition, it can be assumed that education is a component of all of the other categories, so perhaps we need a clearer definition of what items one might find in the category "Education." Besides the individual utilities, members of contracted regional associations, such as the Seattle Saving Water Partnership, share a concern that their regional programs are all evaluated prior to and after implementation to determine cost effectiveness within the entire region. Members offer that if Seattle (or other region) has already determined the cost effectiveness of a program (s), each utility should be able to accept those results without further cost effectiveness determination. Also, members of regional associations often augment regional programs with utility or customer specific programs. Many of these are education programs. Do these individual programs have to be evaluated for cost effectiveness? (3)(d)(i)(A): "If a water use efficiency measure is not selected for implementation from each category that applies to the system, municipal water suppliers shall evaluate at least three additional water use efficiency measures from that category." Please provide a clearer description of what exactly you are trying to achieve in this section of the regulation.	DOH revised the section on evaluating water use efficiency measures for clarity. Education has been removed as a separate category, but municipal water suppliers are required to describe how they intend to educate their customers. Municipal water suppliers must evaluate or implement at least the number of measures outlined in the proposed draft rule language based on water system size.
In addition, the WCCPS members would like to encourage DOH to give serious consideration during the rule implementation phase of developing user –friendly templates or spreadsheets that utilities can use for their data collection and reporting: DOH derives benefits from having the data collection for all reports submitted in the same fashion, with perhaps even the same units of measurement across the board for consistency (it would also be helpful to supply sample conversion formulas to simplify the process.) Utilities would benefit by having a simple spreadsheet to fill out, which could make for greater ease of data handling and analysis and therefore greater compliance for performance reporting. This is	This is a good suggestion. DOH will pursue this idea while developing its detailed implementation plan.

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particularly true in the case of smaller utilities that do not have dedicated conservation staff to implement programs or draft the performance reports. We recognize that, as in the CCR, there will be some narrative language that will be required, but technical assistance in the form of templates similar to DOH's "Sampletown Water Quality Report" would be very helpful during rule implementation. We cannot overemphasize the point of templates and spreadsheets that make data acquisition and analysis as straightforward as possible.	
General comments: The proposed rules and definitions appear to give more weight to the general public's beliefs and opinions than the technical experience of engineers or water operators that work daily in the water industry. The public does not have the technical knowledge or experience to know how to operate or maintain a water system.	The observation may be true in regard to goal setting and selection of water use efficiency measures. This reflects the direction found in the Municipal Water Law.
Affordability of Rates / Affordability of Supplies - The rule refers first to "the consumer" (singular) and then to "they" (plural). Does the rule intend that rates be "affordable" to each individual consumer? To the "average" consumer? Considering the thousands of small water systems in this state, whose customer population bears no resemblance to any maintained aggregated economic data, how does DOH recommend a water purveyor determine affordability for its 16 water connections / customers? The proposed rule: · May conflict with statue set forth in Title 80 RCW. · May harm financial viability by prohibiting companies from recovering reasonable costs required to comply with state and federal mandates. · May be confiscatory without due process to the extent that water companies are prohibited from charging rates they need to provide water in compliance with federal and state mandates.	Deleted definition because term was not used in the proposed draft rule.
The Utilities and Transportation Commission (UTC) regulates certain private, investor owned water companies, both as to rates charged and terms and conditions of service. The UTC works with DOH under a Memorandum of Understanding (MOU) that defines the roles and responsibilities in the water industry between UTC/DOH; DOH is responsible for quality and quantity of water and the UTC is responsible for rate regulation and terms and conditions of	After consultation with UTC staff, DOH revised the proposed draft rule to address the concerns contained in this comment. DOH will continue to work with UTC through rule adoption and implementation to ensure coordination and consistency with laws and rules under the jurisdiction of both agencies.

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service. UTC and DOH are in the process of renegotiating and updating the current MOU. The statues require the Commission to regulate in the public interest and set rates that are "fair, just, reasonable, and sufficient." Title 80 RCW. The UTC's mission statement: "The WUTC protects consumers by ensuring that utility and transportation services are fairly priced, available, reliable and safe." Every state has a regulatory commission similar to the UTC that, in addition to water, regulates energy (gas and electric) telecommunications, and, prior to 1995, transportation companies. The statutory requirements and economic regulation have been litigated through state commissions (initial decisions, reconsideration and appeals), state courts (superior, appeal, and supreme) and the federal courts (district, appeal, and the U.S. Supreme Court) for more than 130 years. Private companies have the right to recover reasonable, prudently incurred expenses, plus an opportunity to earn a reasonable rate of return. Utility services are fairly priced. The costs of providing potable water (both capital and operating) that meets water quality (testing, treatment, and filtration) and water quantity (capacity) requirements are independent of the socioeconomic characteristics of the population served. The courts have consistently ruled that regulatory utility commissions do not have the authority to act as social welfare agencies. Whether or not rates are deemed "affordable" is a matter for the various political and social organizations that have the authority and ability to provide social welfare assistance to the public. DOH should cite its statutory authority: · To determine affordability. · Require all water systems (public and private) to provide water at "affordable" rates, and · Enforce that requirement. Affordability is a relative concept that changes with demographics, geographic areas and even between similarly situated populations. It's not clear that DOH has authority to establish such standards or how DOH would enforce those	

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standards. If DOH is concerned with the cost of water supplied, an alternative, well established concept that has been fully discussed and developed in the economic regulatory arena through the courts is "Least Cost." DOH has the professional staff to ensure water systems are designed, constructed and maintained using reasonable, least cost analysis, which will help to ensure that customers receive water at the lowest, reasonable rates. However, depending upon the socioeconomic conditions within a specific water service area, least cost rates may not meet an "affordability" standard. Affordability of supplies – I don't understand what this means. The rule needs to be clarified. How, when, and who does this apply to?	
Authorized Consumption – the proposed rule uses "implicitly or explicitly." Since there are no other alternatives, "implicit or explicit" adds nothing and is confusing.	The proposed draft rule was revised as suggested.
Capital costs – "Equipment and facilities" are the assets purchased with expenditures, they are not, themselves, expenditures. The definition also does not clearly state that Capital Costs normally refer to long-term investments. Expenditures normally refer to fund-based accounting such as cities. Suggested wording: "Capital costs" means invested costs or expenditures for long-term equipment and facilities used to produce, store, and distribute water.	Deleted definition because term was not used in the proposed draft rule.
Marginal capital costs – Marginal operating costs of producing water - Both proposed definitions refer to the cost of the next unit that won't be produced. Marginal cost is clearly defined in accounting and finance; none I can find refer to the increased cost of not doing something. The general practice is to define marginal costs as producing the next increment and refer to savings as "avoided marginal costs." Alternatively: "Marginal capital costs of producing water" means the change in the total cost associated with long-term equipment and facilities when the increment of supply increases or decreases. "Marginal operating costs of producing water" means the change in the total operating costs that arise when water quantity produced changes.	Clarified definition and will address in guidance.

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Metered consumption – the proposed rule uses "implicitly or explicitly." Since there are no other alternatives, "implicit or explicit" adds nothing and is confusing.	The proposed draft rule was revised as suggested.
Operating Costs - Examples of expenditures are extraneous. Assuming that a "program" and a "project" are separate concepts, the proposed wording restricts the definition to either "implementing a program" or "operating a project."	Deleted definition because term was not used in the proposed draft rule.
Societal perspective - This rule is unclear. Do "environmental impacts" include external costs? What other factors in addition to "environmental impacts"? What does "whole community" mean? The customers served? County? Western Washington? How does DOH intend for a water purveyor to determine the "societal perspective" of whatever "whole community" DOH intends? The proposed rules require water use efficiency measures "that are cost-effective from the societal perspective."(WAC 246-290-810) However the definition does not provide any guidance regarding "societal perspective" other than it is a "point of view" that includes "environmental impacts."	The definition for societal perspective was revised to address this comment as well as several others.
Any rewrite should include a definitive listing of what the DOH wants efficiency measures to be measured against.	DOH considered this suggestion but has concluded that the approach taken is the most appropriate. DOH will provide guidance on how to complete the evaluation process.
Also, the use of "i.e." is incorrect. The correct usage is "e.g."	The proposed draft rule was revised as suggested.
System reliability – It seems that the proposed rule delegates determination of system reliability to the subjective opinions of the water system customers instead of relying on objective, verifiable data related to the system's ability to deliver safe drinking water at adequate quantities and pressure. Suggested wording: "System reliability" means the dependability of the system to deliver safe drinking water at adequate quantities and pressure to the point of use when it is desired.	After further review, we have concluded that this definition is not necessary. Water system reliability is a complex concept that is already addressed in WAC 246-290-420 Reliability and emergency response.
Water use efficiency - Water use efficiency program - The proposed rules appear to replace the concept of "conservation" with the concept of "efficiency." However, conservation is a type of water efficiency. The definitions and concepts as proposed in the April 2005 Water Use efficiency Subcommittee Report should be adopted. On page 7 of the report the	DOH chose to standardize the terminology, and use "water use efficiency" rather than water conservation. This was considered less confusing and more consistent with terminology being used outside of the state.

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Subcommittee defined the following: Water use efficiency: Regulatory programs administered by DOH and implemented by water purveyors that include conservation planning requirements, water distribution system leakage standards, and water conservation performance reporting requirements. Water conservation: Measures undertaken by water purveyors to minimize supply and demand inefficiencies, and lessen water withdrawals and water use. These include internal and external measures. Suggested wording: Water use efficiency program: means policies and activities that include water conservation planning and performance reporting, water distribution-system leakage standards, and water conservation.	
Water Conservation - The proposed rules have eliminated the concept of a Water Conservation Program and replaced it with water use efficiency program. However, water conservation is a subcategory of water efficiency, and the rules should include a definition. Suggested wording: Water conservation: Measures, internal and external, undertaken by water purveyors to minimize supply and demand inefficiencies, and reduce water withdrawals and water use. Consider adding the following: Internal conservation measures (supply-side): Actions and programs under the direct control of purveyor to reduce water system inefficiencies, and improve operations, management, and planning related to water production and distribution. External conservation measures (demand-side): Actions and programs under the control of the purveyor to educate customers, promote how and why to use water efficiently, and offer incentives for customers to reduce water use.	DOH chose to standardize the terminology, and use “water use efficiency” rather than water conservation. This was considered less confusing and more consistent with terminology being used outside of the state.

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WAC 246-290-840 requires various analyses and goal setting by water "system." Most private, regulated water companies operate multiple water companies. Does DOH intend for a company that owns and operates 150 water systems to conduct 150 separate financial analyses, public meetings, goal setting, etc.? If so, private companies may incur substantial costs that they are entitled to recover from their ratepayers.	After further consultation with investor owned water systems and UTC staff DOH has concluded that the requirements of this section can be met with reasonable effort, using current practices for Water System Plans.
(5)(a) I'm unclear of the goal setting process as the rule language is written - which means this rule needs clarification. Does DOH intend that goals must be set in a public forum? Does that mean that the goals are brainstormed in public setting, ideas identified, discussed, debated, prioritized, voted, etc.? Or, would it work like the UTC Public Open Meeting process - here's a list of the goals we would like to consider, the reasons we want to consider them, and then take public comment that the decision makers will consider?	The municipal water requires that goals be set in an open public forum. That requirement is reflected in this proposed draft rule.
WAC 246-290-495(2)(b) - Meters Meters seem to be the most logical and cost effective device to achieve some water conservation measures. It is disappointing to have the most critical portion of the Municipal Water Law tied to the Water System Plan when water companies are only required to update its plan every six years. The new rules require companies to install meters by 2018 – 13 years from now. This is a missed opportunity in many ways.	DOH recognizes that the timeline for meter installation on existing service connections is generous. It has been reduced to 10 years. DOH feels that this length of time is necessary to complete the decision making, planning (financial and logistical), and actual installation of meters on existing connections. It is important to keep in mind that this is essentially a retrofit of some very old equipment.
SBEIS DOH should conduct an SBEIS for these rules to determine the potential costs small water companies will incur to implement the programs and reporting requirements of the proposed rules. This data would provide information to determine if the costs of preparing and receiving the information might out weigh the benefits of the data.	DOH intends to seek financial assistance to help water systems meet the water use efficiency requirements.
Among the things that we like the best about the draft Rule are: • The inclusion of the definitions will greatly assist everyone with implementation. • The focus on using and reporting annual data and three-year running averages will reduce the effect of variability in the data from meter reading schedules and weather variations. • Allowing the utilities flexibility in defining customer classes so they are meaningful for each utility's circumstances. • The reliance on cost-effectiveness and goal-setting at the local level as a	DOH has retained most of these elements in its proposed draft rule; however, some definitions were deleted because the terms were no longer used in the proposed draft rule.

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measure of appropriate conservation efforts. • Making water use efficiency part of the normal 6-year water system planning process will reduce the burden of the additional work required for both Health and the utilities.	
We would like to see an intent section included in the Rule. We have been continually assured by department staff that the goal in this rule-making is to use existing processes and requirements wherever possible, limiting the amount of additional new requirements for planning and reporting as much as possible. We agree with this approach and think that adding such background information in an intent section would ease rule implementation.	DOH feels that the current language provides sufficient direction in regard to intent. Several sections will be revised for clarity. The background information that is referred to will be important elements of guidance documents developed to facilitate implementation of this proposed draft rule.
246-290-010 Definitions We do not see a need to have a definition of **"Affordability of rates"** in the Rule. Decisions on rates must remain under the control of local jurisdictions where the responsibility exists to provide for an efficient and safe utility operation. If this definition exists it could certainly lead to unintended application. We agree with comments from Stevens PUD that the phrase "…as determined by the elected governing board, or governing body" should be added at the end of the definitions of **"Affordability of supplies", "Marginal capital costs of producing water", "Marginal operating costs of producing water", and "Societal perspective"**. These are areas where considerable judgment is involved and differences of opinion could lead to costly "battles of the experts" that would not result in any significant benefit to water use efficiency. In such cases we should rely on the local elected representatives to take the pulse of the community they serve.	Deleted definition because term was not used in the proposed draft rule.
We also agree with Stevens PUD that the term "customers" is better than "consumers" throughout the definitions.	DOH's existing rules use the term "consumers "and it is used in this proposed draft rule for consistency.
We agree with the comments from Kitsap PUD that in most cases water use efficiency will not reduce water production but, rather, will allow a given supply to serve more customers than it would without such measures. We concur with their suggested definitions for marginal costs and water use efficiency: **Suggested wording**: "**Marginal capital costs of producing water**" the capital cost of producing a given quantity of water which can be compared to the similar costs of conservation and efficiency measures required to save or avoid using the same quantity of water.	The revised proposed draft rule does not use the terms addressed in this comment. Therefore, their definitions were deleted. The proposed draft rule only included a general definition for "marginal costs".

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"**Marginal operating costs of producing water"** the operational cost of producing a given quantity of water for a given time period which can be compared to the similar costs of conservation and efficiency measures required save or avoid using the same quantity of water over the same period of time.	The revised proposed draft rule does not use the terms addressed in this comment. Therefore, their definitions were deleted. The proposed draft rule only included a general definition for "marginal costs".
Suggested wording: "**Water use efficiency**" means minimizing water loss to non-beneficial uses and reducing the amount of water required to accomplish specific beneficial uses in certain circumstances.	DOH received and carefully considered a great deal of input in regard to the definition of this term. The definition in the proposed draft rule is derived primarily from input received from the WSAC Water Use Efficiency Subcommittee.
"**Water use efficiency program**" means policies and activities implemented to minimize water loss to non-beneficial uses and reduce the amount of water required to accomplish specific beneficial uses in certain circumstances.	DOH received and carefully considered a great deal of input in regard to the definition of this term. The definition in the proposed draft rule is derived primarily from input received from the WSAC Water Use Efficiency Subcommittee.
The definition of **"Societal perspective**" is unnecessarily limited to only environmental impacts. We suggest replacing "(i.e. environmental impacts)" with "(e.g. environmental, fiscal, social, and economic impacts over the planning horizon)" to capture a broader perspective.	The definition for societal perspective was revised to address this comment as well as several others.
The definition of "**Water supply characteristic**" would be improved, we think, by adding "natural variability and" ahead of "any regulatory restrictions…"	The definition for societal perspective was revised to address this comment as well as several others.
246-290-100 Water system plan We concur with Kitsap PUD's suggested language for (4) (c), which is clearer than the existing: **Suggested wording**: Water demand forecasts, developed under WAC 246-290-221, for the ensuing six-year and twenty-year planning periods, that consider both enacting and not enacting the selected water use efficiency measures, with the following factors taken into account:	This section has been clarified.
246-290-105 Small water system management program In (4) (e), it would seem appropriate to make the same change as in 246-290-100 (4) (e) (iv) specifying that the water right assessment is a self-assessment.	Suggested change included.
246-290-495 Metering requirements As suggested by Stevens PUD, it appears that (3) (c) is redundant to the more-inclusive language in (d). At most, a one or two-word addition to (d) should cover all the issues addressed in both items. Whether this ends up as one or two sub-sections, it (they) should have added at	After consideration by DOH staff, the detail contained in this section is no longer seen as necessary. This section will be simplified.

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the end, the **phrase "whenever practicable and cost-effective, as determined by the public water system"**. This is because there are often space limitations that make it impossible or impractical to meet the manufacturer's specifications in the real world, which require considerable lengths of straight pipe for greatest meter accuracy. Often, such limitations can be offset by special modifications or field calibration of the meter; but, sometimes it is not possible to get specified accuracy over the entire range of the meter due to installation compromises. Generally, this means some under-registering of the meter in flow ranges that, hopefully, are not commonly encountered; and that is an economic trade-off that the utility is best situated to evaluate.	
Also, as suggested by Jefferson PUD, it is not cost-effective to routinely test small service meters. When meters were relatively expensive compared to labor, it was cost-effective to test and repair small meters. Now it makes more sense to test a representative sample of older small meters to determine when to replace them, given that the meter cost is not the largest part of the replacement cost and that testing costs as much as or more than replacement.	After consideration by DOH staff, the detail contained in this section is no longer seen as necessary. This section will be simplified.
246-290-800 Purpose and applicability In (3) it appears that a phrase was inadvertently inserted that would add a lot more work for everyone, especially the Department of Health. To be consistent with the approach taken throughout the rest of the Rule, we suggest removing the phrase "work with the department to", since the more specific language elsewhere in the Rule indicates that it is the supplier's responsibility to set goals and develop their program for water use efficiency. Certainly, we would all appreciate some assistance from Health when needed; but, it seems unlikely that Health would want to or would even be able to be involved in the development of every such program.	After further review, we have concluded that this section is not necessary. A minor change will be made to our general planning requirements to address water supply characteristics and forecasted demand considerations during the program plan development. The other elements of legislative intent are better addressed in guidance.
246-290-810 Water use efficiency elements of water system plans In sections (3) (d) (i) (B), (3) (d) (iii) (C), and (3) (h), we agree with the clarifying language suggested by Kitsap PUD: **Suggested wording**: **(3) (d) (i) (B)** – "No evaluation is required for any water use efficiency measure that has been or will be implemented, nor is an evaluation required for any other measure in the associated category."	DOH clarified the section on evaluating water use efficiency measures.

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(3) (d) (iii) (C) – "When evaluating a water efficiency measure consider the cost-effectiveness of the measure from both a monetary and societal perspective."	
(3) (h) – "For systems serving one thousand or more total connections, provide an estimate of the water that would be saved by each of the evaluated measures that are deemed to be cost-effective.	DOH linked the assessment of further cost-effective conservation measures with the evaluation process outlined in WAC 246-290-810(4) Water use efficiency program. The language has been moved to WAC 246-290-100 Water system plan.
Those of us who participate in regional conservation programs where implementation is across several utilities' service areas would like to be assured through some explicit mention in the Rule that these programs are an acceptable means to meet the requirements for the individual utilities involved. One possible approach would be to add in (2) after "…water use efficiency program" the phrase **"either individually or as a part of a coordinated regional effort"**.	DOH considered including specific language to address regional programs, but determined it was not necessary. Regional programs can be used to meet the requirements of this proposed draft rule. However, each water system will need to demonstrate how participation in regional programs will advance them toward their goals.
246-290-820 Water use efficiency elements of small water system management programs In (3) (c) (ii) we agree with the suggested clarifying language from Kitsap PUD: **Suggested wording**: **(3) (c) (ii)** – "No evaluation is required for any water use efficiency measure that has been or will be implemented, nor is an evaluation required for any other measure in the associated category."	The proposed draft rule was clarified and incorporates this suggestion.
246-290-830 Distribution system leakage standard It is important to note that the calculation to define leakage in (1) (a) includes all unbilled use, whether authorized unmetered use, apparent losses, or actual real losses (see ANSI/AWWA standard G200-04) which is much more than just leakage. Typically, this has been called non-revenue water. Similarly, the definition in (1) (b) includes apparent (meter inaccuracies, billing and accounting errors, etc.) as well as real losses. This has typically been called unaccounted-for water. We would suggest that the approach to determining leakage as described in the AWWA standard in terms of gallons per day per mile of pipe is more appropriate than the percentage figure derived using these formulae. We understand that the AWWA approach was considered by the advisory committee and that it is more complex than Health would like to use for the majority of systems. Given that the goal for regulatory purposes is simplicity of calculation of the measure and that this quest for simplicity sweeps in quantities that are not leakage, it would seem appropriate to allow smaller systems to meet a standard that is less stringent than the 10% number calculated	DOH reviewed AWWA's water audit methodology, and concluded that it is not sufficiently developed to allow its use within a regulatory context. However DOH sees great potential in this work. The proposed draft rule has been revised to allow the use of this methodology, if it is further developed and meets the intent of the Legislature. This language would also allow for the use of other methods that might be more applicable to small rural water systems, if that methodology meets certain criteria. DOH understands the concern that wheeling water through a water system may require larger pipes and higher pressure. Both of these tend to increase leakage. However, we concluded that the language suggested would essentially allow production to the over estimated as it would be counted for both the delivering and the receiving water system. For this reason the language will remain as it appears in the proposed draft rule. The leakage section was revised to better address technical and economic

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using these approaches. Both Skagit and Stevens PUDs have offered similar concerns. Here's a concept to consider: for systems serving 1000 or more connections the 10% standard would apply; for systems serving 500 to 999 connections the standard would be 15%; and for systems serving 15 to 499 connections the standard would be 20% or a volume of 2 gallons per minute, whichever is greater. In (3) it seems to make sense to subtract wholesale water sold from connections upstream of the distribution system; but, sometimes these wholesale connections are at the far end of a distribution system and are similarly situated to any other large retail customer. **Proposed revision to (3):** Systems that export water from a connection upstream of the distribution system shall subtract the amount of such exported water from the total water produced and purchased for the purposes of calculating distribution system leakage. In (8) it would be helpful to use cost-effectiveness as the measure of technically feasible: "…where it is not feasible to cost-effectively achieve compliance." We would also suggest adding at the end of (8) **"Systems with unique service area circumstances may propose an alternative approach to determining an acceptable leakage standard using standard practices of the water supply profession."** This would allow for those with rural systems with few connections per mile of main to propose a gallons per day per mile of pipe approach, as one possible alternative.	concerns.
246-290-840 Water use efficiency goal setting In (5) (c) we would suggest replacing "review and respond to" with "consider" as this is the more appropriate standard for such local actions that are not at the level of formal rulemaking or a land use action, for example. We agree with Kitsap PUD's suggested clarification of the language in (7) (b) for the reasons stated above in the definitions section:	The proposed draft rule was revised to incorporate this suggestion.

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Suggested wording: **(7) (b) "**Measurable outcomes for chosen water efficiency measures" In (9) we suggest inserting "…goals or revised goals." at the end of the second sentence, since the goals could be revised if not met.	
246-290-850 Water use efficiency performance reports We hope that the department of Health will work with the various water utility associations in the crafting of the report forms to make this as user-friendly as possible. For many systems this represents a significant new mandate, requiring new record-keeping systems. We also agree with others' comments that for the smallest systems, such as for those serving fewer than 250 connections, reporting on an annual basis may be overly burdensome. Perhaps, for these smallest systems reducing the frequency to every 5 or 6 years would be sufficient.	DOH will reach out to our regulated community for advice as we develop our detailed implementation plan. We disagree that the annual reporting constitutes an overly burdensome requirement. By using annual reports with three quantitative and one narrative element, we were able to avoid creating other reporting mechanisms that would have been necessary for DOH to carry out the oversight of this program intended by the Legislature.
I believe the proposed metering requirements are totally unreasonable, and very unfair to small water systems. I'm the certified operator for Sunset Ridge Community Water Association. We have 52 active connections, with 4 undeveloped. We're a totally VOLUNTEER organization with limited resources. We've managed to comply with all the recent changes, but the proposed meter requirements are way beyond our abilities. We monitor our source meter and electric usage for any increase that might indicate a leak. We bill on an annual basis and that is enough for us to handle. If we had to install a meter on every line, it would not only be a horrible expense, but who is to read, monitor, check and repair them. As the VOLUNTEER secretary, treasurer, certified operator and unofficial president, I have enough to do. It's like you want to force all small systems to hire professional managers, or do you want to take us all over. It's reaching the point where I can't handle any more.	DOH continues its work to see if further cost reductions can be achieved for small water systems if certain criteria related water use efficiency performance are met. Metering for small water systems is one of the provisions being evaluated.
For very small water systems, the requirement to install service meters does not meet the definition of "cost effective" as defined by draft revision WAC 246-290-010. Net benefits of the project will not exceed or equal the total costs of the project. There will little-to-no reduction in capital costs or operating costs due to installing meters. Our system is extremely small - 14 active connections and one undeveloped connection. There is no treatment, less than one mile of distribution pipe and the system is run entirely by volunteers. We monitor the source meter and electric usage on a monthly basis for any increases that might	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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indicate a leak. Annually, we discuss conservation measures and actual multi-year system water usage trends with all consumers. Installing meters would either expend half of our existing capital reserves if done as one project, or require an increase in water rates of approximately 33% over the 12 years allowed for meter installation. Recommend the exception criteria be expanded beyond mobile home parks and apartment buildings. Exceptions or waivers should be considered for systems with an extremely small number of service connections and/or a small length of distribution piping. If these exceptions are not added, DOH should provide a large number of grants (not loans that would still need repayment) to small companies for the installation of service meters.	
I am the President of the Pebble Beach Water System in Mason County. Our system serves approximately 23 households many of which are summer vacation homes only. Our water source is a natural spring that flows from the ground at 110 gallons per minute. This spring has provided uninterrupted water supply since 1933. The Departments Fact Sheet dated June 2005 suggests many benefits as a result of these new efficiency rules. Our system would not experience any of these benefits because water that is not used by our water system flows directly into Hood Canal. Thus water can be lost in the system or flow straight into Hood Canal, it makes no difference. I should add that our distribution system is glued and has virtually no leakage. The proposed rules do nothing to protect or improve our water supply now or in the future. Systems such as ours should be exempt for the proposed efficiency rules. My question is what are the benefits to the DOH and the water system of the new proposed efficiency rules? My review of the materials suggests that nothing positive will be accomplished. Conservation sounds good, it even smacks of being politically correct. But the reality is that the water systems will be burdened with additional costs and administrative time to comply with the burdensome proposed rules. What use will the DOH make of the reported information? I can assure the DOH that the	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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water system will receive no benefit from implementing the proposed rules. The DOH should be concerned that the water delivered by the water systems is safe and healthy. It is the responsibility of the water system to ensure that adequate water is available to the users of the system. In the real world, the water system will use capitalism to ensure conversation where necessary and eliminate waste to reduce costs. To suggest that the DOH is better able to control efficiency is absurd. In my best estimation, the proposed rules will at least double the operating cost of our system. This estimate does not include the additional charges that the DOH is likely to pass on as they increase staff and support to monitor the new reporting requirements. Please let common sense prevail and eliminate all of the proposed regulations that accomplish nothing.	
In general, I appreciate the efforts of DOH staff to draft the rules in accord with the content and legislative intent of the 2003 municipal water law and the recommendations of the Water Use Efficiency Advisory Subcommittee. Developing these rules, in keeping with statutory requirements, is a challenging process. The initial draft rule language is a good start toward crafting and implementing final rules that comply with the municipal water law and that utilities can successfully implement.	DOH will continue efforts to adopt a rule that can be successfully implemented and meet the intent of the Legislature.
First, I want to point out that less than 30 days is not enough time to review such rule proposals and adequately prepare constructive comments, especially during prime vacation time. As a volunteer on our system's board of directors I have a full time job and other obligations that had to take priority over this. Since I did not have sufficient time to do a good job of reviewing and considering the proposed rule my comments will have to be rather general in nature.	The rule development process will provide additional opportunities to comment on the proposed draft rule prior to adoption.
I was not able to determine from the rule or definitions which parts of the rule applied to our system. The rule language is confusing at best. It is not clear which rules apply to which systems, existing systems, new systems, or expanding systems.	DOH revised the proposed draft rule to be clearer in regard to expectations.
There is no good information regarding the timelines of implementation. The information given is contradictory and makes no sense. In different sections I found that service meters aren't required for 12 years, but compliance is required	DOH revised the proposed language to ensure that the proposed draft rule is appropriately sequenced. Implementation guidance will likely be required to avoid confusion.

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in 5 and reports regarding production and leakage are required in 4. I am not sure how we can report and comply at 4 and 5 years when the tools to do so are not needed for 12. There are several examples of this throughout the rules.	
The paperwork points out that a leakage percentage of 20% has been encouraged in the past. The proposed rule is that a 10% rate will be mandatory. First, this seems like a huge change almost immediately. Second, why should the systems be required to set their own (realistic) goals if the state has already done it for them (arbitrarily).	The 20 percent that was encouraged was based on total water loss. Leakage is only a part of total loss. DOH concluded that 10 percent leakage is a relatively generous standard. In regard to the water system determined goals, the Legislature directed the DOH to treat leakage differently from other water use efficiency issues. We are directed to establish this standard.
Our system serves 34 residences, with the potential for about 4 more. We will never serve more than 40 due to the platting and zoning of our service area. Our system is owned and operated by the homeowners. We have no full time employees and our board of directors is all volunteer. Over the past several years we have worked hard to improve our system and meet all the state and federal regulatory requirements. However, it is becoming clear that we will have to consider other alternatives to a self-owned and managed system if regulatory requirements such as these continue to be enacted. We do not have the resources to continue meeting new regulations, and the proposed rules are a perfect example of this. If they were clear, concise, and made sense these rules would be good for larger systems. For small privately owned neighborhood systems they are overkill and will undoubtedly force many small systems into merging with larger systems, at a huge expense to the small system homeowners. Some small rural systems may not have such options and many homeowners may choose to drill their own well, which would seem to defeat the purpose of encouraging conservation. The bottom line is that, considering all the other regulations in place, these proposed rules are sure to be overwhelming and cost prohibitive for numerous small systems all over the state.	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
WAC 246-290-100: Water use efficiency goal setting The rule requires each individual utility to evaluate water conservation measures and set water conservation goals and program budges on a six year cycle. The concern is, at present, neither our local or regional planning processes align with the rule's schedule.	DOH understands the concerns expressed. Water use efficiency goal setting may create additional work initially; however, the process will become part of the normal water system planning cycle.

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The rule needs to acknowledge regionally coordinated planning. It needs to recognize timing issues and that local and regional planning and budge setting processes do not overlap perfectly. Some allowance needs to be provided for occasions when gaps between planning and budgeting cycles for local and regional plans occur.	
WAC 246-290-100: Water use efficiency goal setting We suggest a revision of section (5)(c) as follows: "The elected board or governing body of the public water system shall review and consider all comments received."	DOH revised the proposed draft rule to incorporate this suggestion.
We encourage DOH to consider developing user-friendly templates and spreadsheets that utilities can use at their option for their data collection and reporting.	This is a good suggestion. DOH will pursue this idea while developing its detailed implementation plan.
Reclaimed Water – Since there is a considerable debate regarding the safety of reclaimed water, each community should be able to reject the introduction of reclaimed water into their neighborhood environments. Somehow, the rule should allow community leaders and decisions makers to reject the use of reclaimed water, based solely upon community preference, without costly economic evaluations.	The proposed draft rule only requires an evaluation of reclaimed water. It is up to the municipal water supplier whether to implement a reclamation program or not.
Conservation Goals – The cost of evaluating conservation measures and addressing societal costs and benefits for a list of conservation measures for my water system is burdensome. I expect the accumulated cost across the state will be a considerable drain on the water system resources. Since the rule requires a "public process", the rule should allow community leaders and decision makers to decide on conservation goals by any means that their individual communities find acceptable.	The proposed draft rule language does allow a great deal of flexibility. The Municipal Water Law does specifically require the adoption of goals by "the elected governing board or governing body" of the water system. This proposed draft rule includes that requirement of law. The procedural requirements included in the proposed draft rule we developed from input received from the WSAC Water Use Efficiency Subcommittee. While there was great debate over specific requirements and level of detail, there was also strong consensus that this proposed draft rule should include sufficient direction so that expectations are clear.
Timing of Goal Setting – By requiring goals be set by July of 2008, goal setting will be required a year earlier than our next Water System Plan. Since the rule requires evaluation during our next Plan, the timing creates a costly duplication of goal setting. The goal setting processes should **only** be part of the regular water system plan process.	DOH appreciates your concern, but we did need to start sometime and the situation will inevitably arise for some water systems regardless of the date this provision becomes effective. We will be able to work with your water system to minimize the complication this may cause.
Annual Reports – Doing costly annual conservation reports before conservation	DOH revised the proposed draft rule to better sequence the different provisions.

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goals are set is not only a waste of time it is probably impossible to do. I suggest the first annual conservation report detailing progress toward the goals be set sometime after the goals are set.	
There is not difference in the size of systems required to do the detailed level of reporting that might be appropriate for large systems. We feel strongly that systems with fewer than 15,000 connections should not have to report as elaborately (or expensively, by the way) as larger systems, so long as the systems wil fewer than 15,000 connections are in compliance with the conservation standards or achieving goals set in their conservation plans.	DOH concluded that three numeric elements and one narrative element is not too much information to collect and report annually.
It is important that groups of water systems are allowed, if not encouraged, to cooperatively develop, evaluate, implement, and be credited for regional conservation plans, public outreach and participation activities, and subsequent conservation efforts.	DOH fully supports regional conservation programs. Conservation measures implemented regionally can count toward the number of measures municipal water suppliers are required to evaluate or implement.
Community leaders and locally elected decision-makers, considering both environmental and economic aspects, should have the final say on whether reclaimed water is introduced into local water system environments.	The draft regulation only requires an evaluation of reclaimed water. It is up to the municipal water supplier whether to implement a reclamation program or not.
True emergency interties (246-290-495 WAC) should not be required to be metered.	The proposed draft rule was revised to clarify that emergency use interties do not require meters.
The costs of evaluating conservation measures and evaluating societal costs and benefits for a list of conservation measures will be burdensome, costing thousands of rate-payer dollars and requiring either additional staff, hired consultants, or both. Since the draft rule requires a "public process", the rule should allow locally elected officials and community interest groups to decide on conservation goals by the means that their community find most acceptable.	The proposed draft rule language does allow a great deal of flexibility. The Municipal Water Law does specifically require the adoption of goals by "the elected governing board or governing body" of the water system. This proposed draft rule includes that requirement of law. The procedural requirements included in the proposed draft rule we developed from input received the WSAC Water Use Efficiency Subcommittee. While there was great debate over specific requirements and level of detail, there was also strong consensus that this proposed draft rule should include sufficient direction so that expectations are clear.
Because goals must be set by July 2008 in the draft rule, goal-setting will be required a year before the next Water System Plan update on some systems. Costly duplication will occur with little benefit if an additional set of goals is required in just the next year. By setting forward the deadline for goals an additional year, the goal-setting process would become part of the regular water system plan process and coordinated therewith.	DOH appreciates your concern, but we did need to start sometime and the situation will inevitably arise for some water systems regardless of the date this provision becomes effective. We will be able to work with your water system to minimize the complication this may cause.
Providing required annual conservation reports before conservation goals are set	DOH revised the proposed draft rule to better sequence the different provisions.

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is nearly impossible to do, as well as being expensive. We recommend that the first annual conservation report detailing progress towards the goals be due some reasonable time after the goals are set.	
We would hope that you will consider minimizing detailed requirements in the draft rule, especially for smaller systems. If for some reason, less-detailed or less-frequent plans and reports contribute to unmet conservation standards and improvements in the stewardship of potable water, then more stringent requirements can be added with rule amendment. Meanwhile, well-intentioned system operators look forward to a workable, affordable rule, with clear expectations and requirements focused on the bottom line for water conservation across the state.	DOH reevaluated its approach to water use efficiency program development and revised these provisions to better tailor requirements to water system size.
We are a small water system (SWS) with total connections of less than 100. We have noted a recent large increase in training, administrative and reporting requirements required by DOH. We question if this is really necessary for small systems such as ours. We do not wish to turn over the management of our water system to professional water managers such as King Water Systems as we feel they will only increase our water cost and provide a lower quality reporting and maintenance with their “cookie cutter” approach to servicing and managing many small systems such as our. Presently we are required to submit or report and keep updated the following: 1. Periodic water testing (justified) 2. Wellhead Protection Program (difficult to update and administrate) 3. Cross Connection Control (a CYA document which creates excess paperwork) 4. Consumer Confidence Report (justified) 5. Periodic Sanitary Survey (justified) Now we will be required to create yet another document on water use efficiency, install water meters on all connections with their associated installation, reading and billing plus added maintenance costs in order to remain in DOH compliance. This is too much to handle for a small water system such as our that utilized volunteer board members for administrative purposes and pays a certified operator to draw water samples for testing, CCC control and WHP, leak surveys, etc. plus operation and maintenance.	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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If the DOH is really interested in promoting a cost effective solution to providing safe, efficient drinking water it should quit increasing bureaucracy and instead implement yearly sanitary surveys conducted by a competent staff which must rotate round the systems to be inspected so that each system benefits from a new pair of eyes with a fresh viewpoint each year. The sanitary survey can be tailored so that leak detection, CCC, WHP, plus other necessary items can be addressed during the inspection. Therefore we request that the draft Water Efficiency Rule as proposed not be implemented for small systems such as ours. We would gladly pay for one of your inspectors to come and check our system once a year if we could eliminate the administrative work required to create and keep up to date our CCC, WHP and the proposed Water Efficiency Rule documents. Lets work to make things more straightforward, not more complex and bureaucratic!	
In the case of the Carson Water System, owned and operated by Skamania PUD, the proposed 10% limit on lost water is unnecessarily tight. The incremental gain realized with a 10% leakage limit over a 15% leakage limit is negligible, while the per-capital cost will be large. Carson sits in the bottom of the Wind River valley. The upper Wind River valley is a rain forest, receiving 80 inches of rain per year on average. Less than 3% of the water in the Wind River is removed for consumption by water rights holders. And the last few years have produced excellent runs of salmon and steelhead. Because of these facts, the proposed 10% limit on lost water strikes me as a 'good idea gone too far'. I can find no rational need to be this tight or this concerned about the volume of water in question for our Carson system. And, any water leaked from the pipes in this system ends up back in the Columbia River anyway. So, what is the point of all this expense?	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
We are all supportive efforts to wisely manage our resources. Many of the issues discussed in the preview of the above proposed regulation are examples of the types of prudent management that is simply "good business". Every business, including water suppliers whether public or private, should be mindful of their inventory, cost of service and their future prospects for growth and how to achieve.	DOH will make considerable effort to communicate to the general public through the communication tools available regarding the water use efficiency requirements.

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However, the water purveyor has a face-to-face relationship with the water customer and will be the recipient of customer questions and complaints resulting from changes to system operations that might affect the price of water. The on-going effects of increased governmental regulations has substantially increased the cost of service for water utilities. Additional monitoring, measuring, reporting and document preparation will continue this trend and invite customer complaints. Therefore, any action, such as those proposed here, should be communicated to the general public by the Department of Health as an operational requirement by the State of Washington for all Group "A" water systems in the state and is not a local effort to raise rates.	
Service metering is an excellent tool in the management of water resources but can be a difficult political and financial problem for the utility. The political issue is, usually, one of education regarding resource management and cost of service control. The financial issue is different and, for some systems, the cost of retro-fitting meters will be significant. It is estimated that the average cost to retro-fit a meter assembly will be approximately $300 - $400 per serve. For the Sunland community with approximately 700 active services, this is well over $200,00 and represents a significant unfunded mandate. Granted, there is a 12 year time period to accomplish this task but by then Sunland will be nearly built out and the number of connections will be close to 1,000. To address this the Commission has directed that all new services will be required to be ready to accept meters in the future. But that still leaves the existing 700 to address and an annual expense of about $20,000 without considering where the labor will come from. Serious consideration is needed to provide access to grants or low interest loans to assist both the public and private sector water purveyors with this task.	DOH intends to seek financial assistance to help water systems meet the water use efficiency requirements.
We respectfully request that you add an additional exception for our duplexes, under the sub-section (2)(d) of WAC 246-290-495 Metering requirements of NEW SECTION, on page 11, as follows: (2) (d) (iii) Duplex complex with a master meter.	The primary reason for the service metering requirement is to measure consumption so that distribution system leakage can be calculated. After extensive consideration of this provision of the proposed draft rule and consultation with several parties, DOH has concluded that the only way to complete a credible calculation of leakage is if service meters are installed on all direct service connections. We have further concluded that exempting certain types of water systems does not meet the intent of the law directing DOH to adopt this rule. Duplex complexes will not be exempted from the service meter

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	requirement.
I believe the rule would be a financial burden to the smaller Group A community systems in my county. …	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.
Larger systems can divide the increase cost of following the rules among connection keeping the cost lower. The cost would be much higher per connection for the smaller systems. Also the smaller systems currently do not have individual meters. This would be an additional cost for them. I propose an exemption for smaller system. At what number of connections to apply the exemption is debatable. I would like to see at least the 20 or fewer connections be exempt.	The primary reason for the service metering requirement is to measure consumption so that distribution system leakage can be calculated. After extensive consideration of this provision of the proposed draft rule and consultation with several parties, DOH has concluded that the only way to complete a credible calculation of leakage is if service meters are installed on all direct service connections. We have further concluded that exempting certain types of water systems does not meet the intent of the law directing DOH to adopt this rule.
I am in the process of getting myself out of town for a vacation, and I don't have the time to thoroughly read or understand the proposed new regulations concerning the draft rule for Chapter 246-290 WAC. I've skimmed them and want to register my concern. I am in charge of a small (16 customers) water company on north Whidbey Island. It is a "development owned by my family, that we've never really wanted to develop, but because of college tuitions and rising property taxes have had to sell a lot not and then. The water company is set up ultimately for 95 hook-ups, but we've decided to try and keep the number of developed lots to 62 or fewer. That is the number of hook-ups the water company can now handle without building another storage reservoir. My parents had the foresight to put in a system years ago that wouldn't need upsizing. However, it also means we have a reservoir tank that is much to big for the number of customers using it. The well itself is metered, as well as each hook-up, so that's no the problem with the proposed new regulations I have – other than the expense of reading them more frequently and unnecessarily. We have been told by the certified water manager who cleans our storage tank, that because of its size and the almost mile of pipe, we should be turning over a lot	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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more water than we do now. Because of this, we went from a basic rate plus usage, to a fixed rate. We have always flushed the liens regularly. I'm sure we still aren't turning over the water that was recommended, but at least it's better than what it was. At this point, we are a Group A system, but a TNC. AT some point in the future, we may not be. I'm sure if the proposed regulations would exempt our system or not. Regardless, I feel there is a definite need for a reasonable process, for exemptions. We're trying to balance the need for safe water with conservation. Our water contract prohibits wasting water and even prohibits using it to water lawns. The proposed regulations would add a whole other level of bureaucracy along with attendant costs, which would in effect, make our water less safe and do nothing else. I am already donating all of my time to the water corporation; the only reason being that if I take a salary, state business requirements would bury me in paperwork. I've made it clear to our customers that as soon as the state makes it complicated enough, I'll be handing it over a paid professional, which with our current customer base, will make the water very expensive. I thought that point was going to be reached on the new arsenic MMLs. Our readings that consistently been one, one hundredth of a point over the new MML, way below the old. As I've heard that that is a very regulated, complicated, and therefore expensive fix, I was ready to quit. I did call and find out that TNCs were exempted as of now. At some point however, they probably won't be if the current drift of regulating continues. The ironic part is that after all of the requirements have been met and paid for, it's the same water coming out of the ground that we're still safely drinking.	
As the Department of Defense (DOD) Regional Environmental Coordinator for Region X (REC X) and on behalf of DOD installation and facilities in the State of Washington, I am submitting DOD comments on the Water Use Efficiency draft rule, which will amend Chapter 246-290 of the Washington Administrative Code. The DoD comments are founded on the doctrine of sovereign immunity, which holds that the federal government is immune from regulation by the states except to the extent that Congress has enacted a clear and unambiguous waiver	The questions raised by the DOD were referred to the Office of the Attorney General for their input. We will have a policy decision to the sovereign immunity by the end of August.

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of that immunity. The draft rule states it will apply to municipal water suppliers, among others. Normally, under the waiver of sovereign immunity under the Safe Drinking Water Act (SDWA), DOD installation and facilities in Washington would comply with applicable SDWA provisions which pertain to water quality. However, the scope of the draft rule addresses issues beyond water quality. The rule is being promulgated pursuant to the Municipal Water Supply – Efficiency Requirements Act, Chapter 5, Laws of 2003, First Special Session (Municipal Water Law). As its preamble states, the Municipal Water Law is "AN ACT Relating to certainty and flexibility of municipal water rights and efficient use of water…" And, as a law regulating water rights, whether acquired under federal or state water law, the Municipal Water Law – as well as an regulations promulgated pursuant to that law (including the Water Use Efficiency rule) – fall outside the scope of the McCarran Amendment , 43 U.S.C. 666. The McCarran Amendment, which defines the extent to which federal agencies are subject to state water rights laws, submits federal facilities to joinder in general stream adjudications, bust does not extend to other requirements affecting water rights. (The Ninth Circuit has held, for instance in United States v. Oregon, Water Resources Dep't 44 F.3d 758 (9th Cir. 1994), that the State of Oregon should not require federal agencies to comply with a general requirement to register any water rights claims predating establishment of the state's permit system in order to preserve those claims.) We, therefore, respectfully request that the Department of Health (Department) provide an exemption acknowledging the rule's non-applicability to the federal government, including DOD installations and facilities. Suggested language for this exemption is provided for your consideration in Attachment 1. While we believe that DOD facilities are exempt from this rulemaking, we do *not* believe we are exempt from the duty to conserve water and use it efficiently. To the contrary, DoD understand and fully supports the Department's efforts to encourage the efficient use of water. And while we may not use identical means of accomplishing the water conservation goals the draft rule seeks to achieve, we do, in fact, strive to achieve those goals in ways mandated through authorities which apply specifically to federal facilities. In accordance with the Executive	

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Order 31123, *Greening the Government through Efficient Energy Management* and the associated implementation guidance developed by the US Department of Energy (DoE), for instance, DoD facilities are working to reduce potable water usage by implementing life cycle cost-effective water efficiency programs that include a water management plan and implementation of water efficiency improvement best management practices. We also report annually to DoE on water Conservation measures we have implemented and the amount of water saved. For some general idea of the extent to which DoD implements its water conservation duties, you can look at the following websites: - Air Force Civil Engineering Support Agency's Air Force Water Conservation Program: http://www.afcesa.af.mil/ces/cesc/water/cesc_watercons.asp - Navy Energy and Water Programs: http://www.nfesc.navy.mil/energy/products/prodserv/default.asp?ID=116 - Army Water Resource Management: http://hqda-energypolicy.pnl.gov/programs/water.asp **Attachment 1 – Suggested Language for Exemption from Water Use Efficiency Rule** Amend proposed changes in the draft rule to WAC 246-290-010 *Definitions* to read: "Municipal water supply purposes" means a beneficial use of water, by an entity other than the federal government. Also, amend WAC 246-290-020 *Applicability* by rewriting subparagraph (2) to read: (2) The rules of this chapter shall apply to all Group A public water systems except: ~~those systems meeting al of the following conditions:~~ (a) Those systems meeting all of the following conditions: (i) Consists only of distribution and/storage facilities and does not have any source of treatment facilities; (ii) Obtains all water from, but is not owned by, a public water system where the rule of this chapter apply; (iii) Does not sell water directly to any person; and	

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(iv) Is not a passenger-conveying carrier in interstate commerce. (b) Those Group A public water systems owned by the federal government, for which the following rules of this chapter shall not apply: (i) 246-290-100 Water system plan (ii) 246-290-105 Small water system management program (iii) 246-290-495 Metering requirements (iv) Rules contained in Part 9 Water Use Efficiency	
I feel the water efficiency law is a really good law that approaches water conservation with common sense. However, I feel the Draft Rule, as written, often does not reflect the Municipal Water Laws intent for a number of reasons. The basic directive of the Law is clearly about a governing body and it's customers (ratepayer) making choices on what is best for them and it has recognized they have the intelligence to decide what to do and how to do it and then to determine the affordability of the options selected. It also is clear in the law that the Department of Health, in writing their Rule, is to use existing methods and simplified procedures in order to minimize costs to water providers. Generally, the MWL does not identify specific actions as being required (i.e. service meters, education, program promotion, residential / commercial / industrial conservation measures, etc.) but rather emphasizes a **water system's discretion** to select, schedule and implement measures that meet its own defined conservation objectives. In doing so, the **supplier** is to use cost-effectiveness as a criteria in their evaluation and decision making process. In spite of the evident legislative direction, note above, the Draft Rule removes Board choices and action and has replaced it with criteria on what the Department of Health wants and thinks is best for everyone. Boards and the public are to make these decisions, not DOH.	We believe that the proposed draft rule strikes the balance intended by the Legislature. Full flexibility is given to the municipal water suppliers to set their goals and select water use efficiency measures. As directed by the Legislature, DOH has provided the procedural requirements for setting goals and selecting water use efficiency measures. The Legislature also directed DOH to establish a distribution system leakage standard. We concluded that in order to determine leakage, production, and consumption must be measured. Source and service meters are therefore essential.
I found that a number of areas in the Draft Rule did not make total sense as written and have offered suggestions to change these to make the Rule more readable and positive in tone.	DOH revised the proposed draft rule to address all technical issues identified and for clarity.
While I personally agree that all public water system services should be metered, I do not agree that it should be required as noted in the Draft. There appears to	The legal basis for requiring service meters is the requirement to set the distribution leakage standard. In order to apply the standard, water systems must

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be no statutory direction or citing that requires service meters for all municipal water suppliers. However, service meters should certainly be encouraged. Instead of DOH saying metering is required, why not recognize metering as one of the choices DOH can encourage an unmetered system to select which would put the decision I the Board's hands where it belongs and could potentially start a positive move forward toward service metering.	determine leakage. To determine leakage, the water system must measure the water systems input and consumption. DOH conducted extensive research and consultation with stakeholders and concluded that the only way to complete a credible calculation of distribution system leakage is to measure all the water systems input and consumption. Cost-effectiveness is only mentioned in the Municipal Water Law under the section that addresses selection of conservation measures. Metering is being required to implement the distribution leakage standard. However, there is ample evidence to support the argument that service meters are the most cost-effective efficiency measure that can be implemented. DOH considered a number of alternative approaches, include the one suggested and concluded that a full service metering requirement was necessary to meet implement a credible distribution system leakage standard.
Guthrie Cove Estates Owners Association (GCEOA) operates a small water system on Orcas Island in San Juan County. We have 16 residential water connections at present, with approval for up to 22 residential connections. We are therefore at the extreme low end of the size range for water systems governed by the proposed requirements. As the enclosed report on water consumption for our system indicates, GCEOA already meets the standards and goals contained in the proposed requirements.	This appears to be an introductory statement for subsequent comments.
Our concern, however, is the potential burden, financial and otherwise, of the requirements on very small systems such as ours. We rely heavily on volunteers to monitor the performance of our system both qualitatively and quantitatively. Any increase in reporting requirements will impose an additional burden on those volunteers, who area already contributing significant time and effort to the monitoring of our system. To the extent that the proposed rules required increased mechanization of the system or monitoring by outside professions, the costs of such mechanization or monitoring will impose a disproportionately large financial burden on the small number of households supported by, and supporting, our system. **We therefore request that the Department consider ways to minimize that burden, for example by establishing a "per connection" maximum cost that will limit that amount a**	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it met the intent of the Legislature.

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household must pay to satisfy the reporting and monitoring requirements (unless subsidies are available to defray the costs of complying with those requirements).	
We also ask the Department to consider adopting lesser reporting standards for very small systems such as ours, which in addition to a small number of possible connections also have only residential users and only minimal opportunities for increased conservation measures.	DOH concluded that three numeric fields and one narrative field is the minimum information should not be overly burdensome to report annually. This approach allowed us to avoid creating additional reporting requirements to ensure we provide the program oversight intended by the Legislature.
Small systems such as ours should be exempt from formal "public process" requirements, which are unnecessary in our context where all decisions are made or ratified by all members of the system.	State law requires all municipal water suppliers to set their goals in an open public forum.
The rules should also recognize that most water systems in areas such as ours, where water is not plentiful, are of necessity already implementing extensive conservation measures; it will be extremely difficult to improve upon our performance, making the goal-setting requirements a meaningless exercise. In addition, the implementation of a rate structure that promotes conservation is problematic in our Association, in large part due to the very significant administrative burden it would place on our Treasure, who is a volunteer, not a paid employee. **We propose that very small systems that have demonstrated water use will below the accepted standard**, as is the case in our community (average consumption less than 180 gpd), **be exempt from the rate structure requirement.**	The proposed draft rule recognizes that many water systems will not need or be able to conserve more water. Periodic evaluation of performance is required. DOH feels this is necessary to ensure performance is maintained over time. The proposed draft rule does not require adoption of any rate structure. State law only requires evaluation of the feasibility of adopting rate structures that encourage efficiency. This proposed draft rule simply incorporates that requirement in state law.
As is clear from the layman's terms used in this letter, we are not water system experts, ant there are no doubt ways other than those we have suggested to address our concerns. We support all reasonable regulations relating to the health, safety and efficiency of our water supply and system. But we urge the Department to consider the financial and other burdens of its regulations on very small water systems. To paraphrase the head of our water committee, for GCEOA, "Cost-effectiveness" depends in very large part upon our being permitted to manage all aspects of our water system on our own, and to take the steps deemed necessary to ensure compliance with qualitative and quantitative requirements ourselves, with the help of local contractors when necessary.	DOH recognizes that this proposed draft rule will have significant costs for all municipal water suppliers. Those costs are expected to have a disproportionate impact on small water systems. DOH consulted with business interest groups and small water system owners throughout the rule development process and incorporated several provisions to minimize the cost of the proposed draft rule while ensuring it meets the intent of the Legislature.
As we repeatedly stated in the many meetings of the Subcommittee we attended, these water efficiency rules ere intended to bring balance to the incredible increase in flexibility given to municipal water suppliers through the adoption of HB 1338. We believe that when municipal water suppliers exercise their new-	DOH agrees that the water use efficiency rule is a critical component of the Municipal Water Law. We believe that, in general, the proposed draft rule strikes the balance intended by the Legislature. It provides enforceable requirements with consideration of the different circumstances faced by

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found flexibility, their withdrawals and diversions will further deplete and degrade public water resources. The only component of this legislation that afforded any protection for natural resources was the requirement that water suppliers become more efficient with their water sue in Section 7 of the bill, thereby limiting or postponing impacts to instream flows and other public water resources. In general, we are disappointed by the lack of specificity in this rule, as well as the limited nature of the mandates designed to achieve greater water use efficiency. We hope that DOH will consider strengthening the rule language so it demonstrates a meaningful commitment o reducing water use in Washington.	municipal water suppliers.
WAC 246-290-010 **Affordability of rates** – should include some acceptable standard for calculating relationship between income and water rates as a percentage of "necessities."	Deleted definition because term was not used in the proposed draft rule.
WAC 246-290-010 **Affordability of supplies** – We propose this amendment: means that ability of a community to bear the cost, from the utility, the rate payer and the societal perspective, of providing safe and reliable drinking water to meet current and future public health ~~and economic~~ needs. Economic need should not be considered in affordability, nor should discretionary water sue, such as outdoor irrigation.	Deleted definition because term was not used in the proposed draft rule.
WAC 246-290-010 **Capital costs** – this is an ambiguous definition. It should more specifically call out expenditures for infrastructure and facilities. State that capital costs relates to the necessity to startup or develop a program is irrelevant and should be stricken as it is too limiting.	Deleted definition because term was not used in the proposed draft rule.
WAC 246-290-010 **Cost-effective** – We propose this definition to replace the proposed definition: <u>means the present value of benefits of a program project or measure exceed the present value of the costs of a program, project or measure as measured through analysis according to guidance provided by the department.</u>	DOH revised this definition to be more generally applicable. The definition does not reference future guidance. DOH does, however, intend to develop such guidance.
WAC 246-290-010 **Operating Costs** – It is unnecessary to state that they are "necessary to implement a program or operate a project over time" and this language should be stricken as too limiting.	Deleted definition because term was not used in the proposed draft rule.

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WAC 246-290-010 **Public forum** – should state that it is a public meeting as defined by Open Public Meetings Act, Ch. 42.30 RCW.	This RCW citation is for state agency meetings only. Revisions made to the public forum provision of the proposed draft rule were intended to address concerns raised over the original version of the proposed draft rule.
WAC 246-290-010 **Societal perspective** – The definition provided is too ambiguous and brad, especially as it relates to the cost-effectiveness analysis required by public water suppliers. The definition should include a reference to environmental benefits and avoided environmental costs. At a minimum, some specifics should be identified as required to be considered (such as those identified in the Workgroup Report), including: • Avoided energy costs • Avoided cost of delaying, deferring or minimizing costs of production, transport, storage, treatment, wastewater treatment, and distribution capacity increases • Avoided cost of water purchases • Avoided environmental costs and environmental benefits (improved water quality, recharge areas, increased water in streams, decreased contaminants) • Capital expenditures • Associated operating costs • Costs to customers These parameters should be included in the guidance document **at a minimum**, with explanation bout how to conduct analysis of each.	This definition was revised with consideration of this and several other comments.
WAC 246-290-010 **Water supply characteristic** – this definition is vague and ambiguous. As used in this Chapter, it encompasses the entirety of the water suppliers' description of how its supply impacts the environment. This definition is too minimalistic as to have any meaningful purpose. We recommend the following definition: <u>means the identify of the source of water supply, whether ground or surface water, including watershed within which source exists, name of stream or river source, and all affected water bodies (ground and surface)(hydraulically connected, or likely to be hydraulically connected, to the source of supply; and a description of impacts to the following resulting from the withdrawal or diversion of the supply: water quality, ESA-listed species and associated habitat, instream flow,</u>	This definition was revised to better address the elements listed in this comment.

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and existing senior water rights.	
WAC 246-290-100 (4)(e)(ii)(B) "A narrative description of the system's water supply characteristics" is too vague. What should be required, rather, is a narrative description of the source of supply and impacts related to the water supply. Specific characteristics / impacts should be indicated in the rule as necessary to be included in this description, such as what is the source water body, what are potential and likely impacts to instream flows, hydraulically connected ground water, fish habitat, water quality, etc. **See Source Description Inventory, Appendix E to the Water Use Efficiency Subcommittee Report.**	This definition was revised to better address the elements listed in this comment.
WAC 246-290-495 Metering requirements. (2)(b) Service meters must be installed on all existing service connections prior to January 1, 201~~8~~0. Twelve years to achieve metering is **too long**. As DOH has repeatedly stated, metering is the most credible way to address leaks and make water use more efficient. Four years is sufficient time to implement this requirement. Water suppliers have been on notice for more than 10 years that service meters are recommended through DOH's Conservation Planning Requirements document (dated March 1994). Alternatively, DOH should consider requiring a phased-in approach to meter installation, such as 25% of service meters to be installed per year beginning in 2007, with a completion date of 2010. (4) Allowing a system that is not metered to "develop a meter installation schedule with milestones…" is unacceptable. First, there is not timeframe for this requirement, either in terms of when this provision becomes effective, or when it must be completed. Second, what is the water supply supposed to do with this schedule? Submit it to DOH? This language effectively provides an exemption from achieving metering and allows public water suppliers to further delay installation of service meters, which should already be part of reasonably practice. Rather than allowing such an ambiguous departure for metering requirements, DOH should determine the timeframe for achieving compliance, and use its regulatory authority to create incentives for complying and	DOH recognizes that the timeline for meter installation on existing service connections is generous. It has been reduced to 10 years. DOH feels that this length of time is necessary to complete the decision making, planning (financial and logistical), and actual installation of meters on existing connections. It is important to keep in mind that this is essentially a retrofit of some very old equipment.

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disincentives for not complying.	
WAC 246-290-810 Water use efficiency elements of water system plans. • (1) This section applies to water system plans submitted to the department for approval after January 1, 200~~7~~6. This section should go into effect immediately. Municipal water suppliers have been on notice about the anticipated changes in law for over a year. Furthermore, the rule as written does not depart greatly from the Conservation Planning Requirements document (dated march 1004), which many water suppliers should have been following for the last 11 years.	DOH disagrees. Municipal water suppliers need sufficient time to develop their planning document after the proposed draft rule is formally adopted. Until formally adopted the specific requirements are uncertain.
• (3)(c) Describe their water use efficiency goals and document that they are set in accordance with WAC 246-290-840 for water system plans submitted after July 1, 200~~8~~6. Again, the proposed timeline is too lax and unreasonable. • (3)(d) Evaluate at least one water use efficiency measure from each category listed in Table 1… This requirement deviates from DOH's Conservation Planning Requirements (recommended programs, p.23) and appears to contradict the requirement in RCW 70.119A.180(4)(a)(ii)(A) that municipal water suppliers must select and implement cost-effective measures to achieve their conservation objectives. Limiting the cost-effectiveness evaluation in this manner is an arbitrary and unreasonable weakening of DOH's previous recommendations and if implemented would likely render this requirement meaningless.	DOH disagrees. Municipal water suppliers need sufficient time to develop their planning document after the proposed draft rule is formally adopted. Until formally adopted the specific requirements are uncertain.
There should be no numeric minimum of measures to be evaluated. Rather, a comprehensive list of commonly used measures should be included from which water suppliers can choose to evaluate.	DOH feels that our approach to water use efficiency program development is appropriate. We further believe that the necessary linkage between goals and selected measures is achieved by the proposed draft rule language.
A requirement should be imposed in this rule that municipal water suppliers demonstrate **quantitatively** (not qualitatively, as proposed in (3)(d)(iii)(C)) that implementation of the chosen measures will achieve the conservation objective/goal established pursuant to WAC 246-290-840. We recommend including the list in Appendix G of the Water Use Efficiency Subcommittee Report.	

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WAC 246-290-830 Distribution system leakage standard. Because the interpretation of "distribution system" by the majority of Subcommittee members, and apparently DOH, was no narrow, there should be no change to the numeric standard in (2) of ten percent.	DOH retained the ten percent standard.
WAC 246-290-840 Water use efficiency goal setting. • (1) All municipal water suppliers shall establish eater use efficiency goals for each public water system that supplies water for municipal water supply purposes prior to July 1, 2008~~7~~. A year and a half should be ample to allow this process to occur. Any further delay is unreasonable and unnecessary.	DOH modified goal setting deadline because of confusion created by lack of sequencing according to many comments received.
WAC 246-290-840 Water use efficiency goal setting. • (3) We recommend requiring municipal water suppliers to evaluate and re-establish water use efficiency goals every two years, rather than every six years. To allow such a long period of time to elapse between goal setting and evaluation will foster a disconnect between the goal and actual performance and stretch the timeframe unreasonably long for correction of a goal is not being met.	DOH believes that the connection between goals and performance can be managed through the annual performance report requirement. To require goal re-evaluation every two years does not integrate this proposed requirement with existing six year water system planning cycles.
WAC 246-290-840 Water use efficiency goal setting. • (5)(b) The public notice requirements should have more structure in this rule, including the following types of notice to be included: <u>- notice to water supplier customers (via billing insert is the logical means to accomplish this)</u> <u>- notice to parties who request notice</u> <u>- notice to affected Indian Tribes</u> <u>- local governments within or surrounding the water supply area</u> <u>- internet notice if the purveyor maintains a website</u> <u>- conspicuous placement of signs and advertisements at water supplier's office and, where appropriate, city hall</u> <u>- notice to the Department of Health, with DOH maintaining a website with times, dates and locations of upcoming goal-setting forums.</u>	DOH considered these suggestions as well as several others received and revised the goal setting provisions to better address the concerns expressed.

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WAC 246-290-840 Water use efficiency goal setting. • (5)(d) The following must be made available to the public for the purpose of fully documenting the rationale for each goal. (i) All information listed under WAC 246-290-810(3) or 246-290-820(3). (ii) Annual water use efficiency performance reports prepared under WAC 246-290-850. (iii) Water supply characteristics	Consideration of water supply characteristics is a component part of the goals under the revised proposed draft rule language.
WAC 246-290-850 Water use efficiency performance reports. • (3) Systems serving one thousand connections or more must submit their first performance report by July 1, 2008~~7~~, then by July 1 each year thereafter.	The timing of performance reports was established with consideration of the time needed for water systems to compile information as well as DOH workload impacts.
In addition to the above comments, we encourage DOH to include general elements of guidance documents in the rule where guidance is mentioned or intended to complement the rule.	This is a good recommendation for any element of a rule that refers to a specific guidance document. While we intend to develop guidance documents to help water systems comply, they have not yet been developed and therefore cannot be referenced. None of the provisions of the proposed draft rule are written such that references to existing guidance by DOH or any other entity would be appropriate.
We believe the draft rule is an important step in raising the level of water conservation by all municipal water utilities across Washington State. In general, we support the recommended rule changes.	No change needed.
WAC 246-290-010 Definitions "Leakage" – definition is missing from the WAC.	The distribution system leakage provisions sufficiently define leakage. A further definition would be confusing or duplicative.
WAC 246-290-495 Metering Requirements (a) Source meters must be installed on all new and existing sources, including system interties, utilized by a public water system – Some Tacoma and purveyor interties are not metered, with the understanding that they are to be used only during emergencies. Please add wording to eliminate metering from emergency interties.	The proposed draft rule was revised to clarify that emergency interties do not require meters.
2(d) Service meters are required unless the service connection serve consumers in a: i) Transient non-community public water system ii) Mobile home park with a master meter iii) Apartment building or complex with a master meter Tacoma provides direct water service to condominium projects and planned	The proposed draft rule was revised to improve the list of exceptions for metering. In addition language was added to address issues related to ownership and legal jurisdiction of the purveyor.

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residential developments where residences are served by a master meter. The three exceptions above don't appear to cover this situation. Please combine items ii and iii to include any master metered customer and/or add a service meter definition that includes metering of municipal water supply at the point of delivery to the billed customer property.	
WAC 246-290-830 Distribution system leakage standard (1) Distribution system leakage may not exceed ten percent of total water produced and purchased: We concur with Seattle Public Utilities' comment provided below: Please include language in the WAC that provides for the consideration of alternatives to the percentage of total water supplied where alternatives provide a better evaluation of the water system's leakage performance. This provision is included in the final version of SB 1338 amending RCW 90.03.015, Section 7(4)(b). The DOH WUE Advisory Committee discussions on February 17 pointed to the need for DOH to allow equivalent volume-based or other methods of measuring distribution system management efficiency that do not penalize utilities who implement successful conservation programs. Otherwise, continuing decline sin total consumption from conservation may result in an apparent (rather than real) increase in leakage if measured as a percent of total water use. The AWWA Water Loss Task Force has identified a number of leakage performance indicators that are preferred over measuring real losses as a percentage of system input volume (see AWWA water audit methodology, Table 2: Performance Indicators for Non-revenue Water and Water Losses: http://www.awwa.org/WaterWiser/waterloss/Docs/03IWA_AWWA_Method.cfm)	After extensive review of AWWA's water audit methodology, DOH has concluded that it is not sufficiently developed to allow its use within a regulatory context. However, DOH sees great potential in this work. The proposed draft rule has been revised to allow the use of this methodology, if it is further developed and meets the intent of the Legislature.
(2) Municipal Water Systems (MWS) may request an exemption from the ten-percent standard for systems where it is not technically feasible to achieve compliance: We concur with Seattle Public Utilities' comment: An exemption should not be allowed to dilute the value of the standard. At the same time, it is technically feasible to replace all losses given enough funding (e.g. it is technically feasible to deliver bottled water daily to all users, but this is not economically feasible). Given the importance of meeting the leakage standard, please limit this exemptions by requiring an independent third party	The leakage section was revised to better address technical and economic concerns.

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assessment of the economic feasibility of water loss reduction as a required element of the MWS water system plan for any utility exceeding the compliance standard and who is not proposing to implement a required water loss control action program.	
(3) Calculation of distribution system leakage at or less tan 10% of their production: Appendix F, titled Water Balance Format, in the Water Use Efficiency Subcommittee Report does not include a calculation deduct "Billed Water Exported" in the 4th column yet we understood the intent is to deduct Exported Water from the System Input Volume (1st column). If the intention is to calculate distribution system leakage we suggest "Billed Water Exported" should be a separate group in the consumption column (4th) to remove the quantity from the total calculation. This consumption water will be accounted for by the customer importing or purchasing the water.	This comment refers to the WSAC Water Use Efficiency Subcommittee's Report. The proposed draft rule does not go to the level of detail that this comment addresses.
WAC 246-290-840 Water use efficiency goal setting We note that eh SSHB 1338 language called for the Department of Health to review the current department conservation planning guidelines and include those elements that are appropriate for rule. The current conservation planning guidelines speak to when more stringent conservation measures may be required. Those conditions in the 1994 guidelines were: 1) where regional water resource plans, pursuant to RCW 90.54.045 (Water Resource Planning – Pilot Process), have been or are being developed and include more rigorous conservation standards; 2) for areas designated as critical water resource situations, pursuant to WAC 173.500.080 (Critical Water Resource Situation Response Process), where the intergovernmental group has developed conservation requirements more rigorous than those in the current Conservation Planning Requirements, or 3) if legislation is passed mandating additional conservation efforts. We encourage the departments to propose language that speaks to when more stringent conservation measures may be required. We believe certain proposals, such as regional projects or measures proposed in critical water resource areas, may merit consideration of more stringent measures. We remain concerned about placing this decision making entirely with local authorities because the beneficial uses of water, such as environmental protection, may not be fully represented at a local level.	The issues raised by this comment were debated at great length by the WSAC Water Use Efficiency Subcommittee. After submitting a number of proposals to the Subcommittee DOH concluded that such an approach would not result in better water use efficiency performance. The reason is that the law gives full discretion to the municipal water supplier to set goals and select measures to meet them. The only additional requirement DOH could impose on municipal water suppliers that meet criteria such as those suggested would be more process and evaluation.

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Acronyms

AWWA	American Water Works Association
CCR	Consumer Confidence Report
DOH	Department of Health
Ecology	Department of Ecology
PUD	Public Utility District
SMA	Small Management Agency
UTC	Utility and Transportation Commission
WAC	Washington Administrative Code
WSAC	Washington Water Supply Advisory Committee
WSP	Water System Plan